Help Document
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Introduction

Asset Management

ManageEngine AssetExplorer is a comprehensive Asset Management Software that helps to manage all your IT and Non-IT assets. AssetExplorer offers a single view to track and manage all your assets. With AssetExplorer, you can track and manage ownership of,

- IT & Non-IT Assets
- Software Asset Management
- Purchase Orders
- Contracts

IT & Non-IT Asset Management

AssetExplorer helps you to manage,

- IT assets such as, workstations, switches, routers, printers, and access points
- Non-IT assets such as basic fixtures, furniture, chairs, tables, projectors, scanners and desk phones
- Asset Components such as keyboards, mouse and printer inks.

Software Asset Management

Software License Management

AssetExplorer helps you to manage software licenses installed across the enterprise. You can consolidate and manage all your software licenses from a single screen. AssetExplorer will scan and automatically pickup license keys for Microsoft Windows and Microsoft Word. You can key-in all the licenses purchased earlier and track future purchase of software licenses through the Purchase module.

Software Metering

AssetExplorer helps you to track the usability of the installed software across organization. It gives the count of rarely used, frequently used and occasionally used software.

Software Compliance

AssetExplorer tracks purchased versus installed licenses helping you to ensure software license compliance. The scheduled scan alerts you when an unauthorized software installation is detected, ensuring software compliance on an on-going basis.

Configuration Management Database (CMDB)

Configuration Management Database (CMDB) lets you track and manage all your Configuration Items (CIs) in a single repository. Unlike the asset database that comprises of a bunch of CIs, the CMDB in AssetExplorer is designed to support a vast IT structure where the interrelations between the CIs are maintained and supported successfully. It’s the CI relationship that makes the CMDB an effective decision making tool, impact and root cause analyzer.

Purchase Orders

AssetExplorer offers a complete Purchasing system that helps you manage POs with approvals. Detailed reports based on POs such as POs by required date help you plan your asset roll out in advance.
Contracts

AssetExplorer helps you effectively manage contracts with different vendors. It keeps a check on the expiry date and alerts for renewal. Detailed reports based on contracts such as contracts by maximum spend and contracts by vendors helps you negotiate and make informed decisions.
System Requirements

Hardware

The following table lists the hardware system requirements, according to the number of nodes, for installing AssetExplorer application.

<table>
<thead>
<tr>
<th>No. of Nodes</th>
<th>Processor Type</th>
<th>Processor Speed</th>
<th>RAM</th>
<th>Free Hard Disk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 5000</td>
<td>Intel Core Duo</td>
<td>3.4 GHz</td>
<td>4GB</td>
<td>40GB</td>
</tr>
<tr>
<td>5000 - 10000</td>
<td>Intel Core Duo</td>
<td>3.4 GHz</td>
<td>4GB</td>
<td>60GB</td>
</tr>
<tr>
<td>10000 and above</td>
<td>Intel Core Duo</td>
<td>Dual Processor</td>
<td>4GB</td>
<td>100GB</td>
</tr>
</tbody>
</table>

Operating System

Windows

- Windows 2000 + SP4
- Windows 2000 / 2003 Server
- Windows XP Professional
- Windows 2008 Server
- Windows 7

Linux

- Red Hat Linux 7.2 and above
- Linux Debian 3.0

Supported Database

- MySQL 4.1.18
- MS SQL 2000, MS SQL 2005, MS SQL 2008
Installing AssetExplorer

- In Windows
- In Linux

In Windows

Follow the steps given below to install and set up the ManageEngine AssetExplorer.

1. Download `ManageEngine_AssetExplorer.exe` file.
2. Click the .exe file to start the installation. The AssetExplorer installation wizard appears. Follow the instructions given in the wizard to successfully set up AssetExplorer.
3. On accepting the license agreement, the installation wizard provides you with an option to choose between Trial Edition and Free Edition of the AssetExplorer application. Free Edition never expires but is restricted to a single technician login and 25 nodes (workstation) discovery. The Trial Edition is valid only for 30 days and provides two technician login. There are no other restrictions.
4. The next step is choosing the installation directory. By default, the application is installed in `C:\ManageEngine\AssetExplorer` directory. If you want to change the installation directory, then, click the Browse button beside the directory path.

   **Note:** The installation directory or its parent directories must not have any space character in its name.

5. From the file chooser window, choose the directory of your choice and click Next.
6. Provide a name that needs to appear in the Programs folder. By default, it is `ManageEngine AssetExplorer`.
7. Click Next.
8. Enter the port number that has to be used to run the web server. The default port number provided is 8080. If you already have any application running in that port, then enter the number of the port that is free and can be used by the web server to run the AssetExplorer application server and click Next.
9. The Registration for Technical Support form is displayed. This is an optional form and this enables you to register for technical assistance. By registering, it helps the technical support team to be better informed about your organization and its specific needs and hence provide a more focused support. Enter the details such as Name, contact E-mail ID, Phone Number (helps in making calls for immediate support), Company Name, and Country.
10. Click Next.
11. The details that you have provided till now will be displayed as below for your confirmation:

   **Installation Directory :** C:\ManageEngine\AssetExplorer
   **Folder Name :** ManageEngine AssetExplorer
   **WebServer Port :** 8080

   If the displayed information is correct, then click the Next button, or else click the Back button and make the necessary changes and proceed with the installation.
12. After you confirm the above details, the application is installed. On successful installation, the following screen is displayed.

13. When you choose to start the AssetExplorer Service, the AssetExplorer Server is started automatically and the client window opens. If you do not wish to view the readme file or start AssetExplorer as a windows service, de-select the options provided.

14. Click Finish to complete the installation.

Following the instruction as suggested above, the ManageEngine AssetExplorer program group is created in the Start menu. Also, the AssetExplorer server will be started and the client window opens with the login page. Enter the User Name as "administrator" and Password as "administrator" to log in to the application.

To manually start the AssetExplorer application

1. Click Start -> Programs -> ManageEngine AssetExplorer -> AssetExplorer Server to start the web server. This takes approximately 2 minutes in a Windows XP, 512 MB RAM, and 1.0 GHZ processor. Generally, the server is started and the web client is also launched in the default browser.

2. If the web client is not launched automatically, then click Start -> Programs -> ManageEngine AssetExplorer -> AssetExplorer Web Client to start the web client. The application opens the login page in your default web browser.

3. Enter the User Name as "administrator" and Password as "administrator" to log in to AssetExplorer. As soon as you log in, AssetExplorer scans the machine collecting information of the software and components associated with it. Click Start button to view the Configuration Wizard home page. To configure your application settings, refer to the Configurations section.
To shut down the AssetExplorer application

1. Click **Start -> Programs -> ManageEngine AssetExplorer -> Shutdown AssetExplorer**. A confirmation message is displayed.
2. Click **OK** to proceed with the shut down.

Alternatively, you can also right-click on the system tray icon and choose **Shut down Server**. A confirmation message is displayed; click OK to shut down AssetExplorer.

To reinitialize the server

1. Go to `<AssetExplorer>\bin` directory.
2. Execute `reinitializeDB.bat` to reinitialize the server.

**Note**: Please note that all the data in the server will be lost when you reinitialize.

In Linux

Follow the steps given below to install and setup the ManageEngine AssetExplorer application:

1. Download the `ManageEngine_AssetExplorer.bin` file.
2. Execute the `.bin` as given below, at your command prompt:
   ```
   ./ManageEngine_AssetExplorer.bin
   ```

   **Note**: You need to have execute permissions for executing the `.bin` type files.

   The following screen of the installation wizard is opened and the you will be guided through the installation process.
3. Click **Next** and follow the steps given in the installation wizard.
4. The second screen displays the License Agreement. You need to accept the license agreement to proceed with the installation. So select the radio button accepting the license agreement and click **Next**.
5. On accepting the license agreement, the installation wizard provides you with an option to choose between Trial Edition and Free Edition of the AssetExplorer application. Free Edition never expires but is restricted to only 25 nodes (workstation) discovery. The Trial Edition is valid only for 30 days and provides only 25 nodes discovery. Choose the appropriate edition for your need and click **Next**.
6. The next step is choosing the installation directory. By default, the application is installed in `home/<user>/ManageEngine/AssetExplorer` directory. If you want to change the installation directory, then, click the **Browse** button beside the directory path.
7. From the file chooser window, choose the directory of your choice and click **Next**.
8. Enter the port number that has to be used to run the web server. The default port number provided is **8080**. If you already have any application running in that port, then enter the number of the port that is free and can be used by the web server to run the AssetExplorer application server and click **Next**.

   **Note**: If you wish to provide a port number lesser than 1024 as the web server port, then you need to be the super-user of the system to successfully install and run AssetExplorer application.
9. The Registration for Technical Support form is displayed. This is an optional form and this enables you to register for technical assistance. By registering, it helps the technical support team to be better informed about your organization and its specific needs and hence provide a more focused support. Enter the details such as Name, contact E-mail ID, Phone Number (helps in making calls for immediate support), Company Name, and Country.

10. Click Next.

11. The details that you have provided till now will be displayed as below for your confirmation:
   
   **Details of Installation**
   
   **Installation Directory:** home/<user>/ManageEngine/  
   **Product Size:** 34 MB  

   If the displayed information is correct, then click the Next button, or else click the Back button and make the necessary changes and proceed with the installation.

12. After you confirm the above details, the application is installed. If you do not wish to view the Readme file, de-select the check box.

13. Click Finish to complete the installation.

To manually start the AssetExplorer application

1. Go to the <AssetExplorer>/bin directory and execute the run.sh file as given below: $ sh run.sh

2. To start the web client, open a web browser and type the following in the address field: http://localhost:8080 Here, you need to replace the localhost with the corresponding server name where the AssetExplorer web server is running and the port number 8080 should be replaced with the actual port where the server is running. The application opens the login page in your default web browser.

3. Enter your user name "administrator" and password "administrator" to log in to AssetExplorer. As soon as you login the configuration wizard home page is displayed. Follow the instructions provided in the wizard and click the Next button.

To configure your application settings, refer to the Configurations section.

To shutdown the AssetExplorer application, execute shutdown.sh file from the bin directory as below:

    sh shutdown.sh -S

To reinitialize the server

1. Go to <AssetExplorer>/bin directory.

2. Execute reinitializeDB.sh to reinitialize the server.

Note: Please note that all the data in the server will be lost when you reinitialize.
Uninstalling AssetExplorer

- In Windows
- In Linux

In Windows

To uninstall AssetExplorer from Windows

1. Click Start -> Programs -> ManageEngine AssetExplorer -> Uninstall AssetExplorer.

In Linux

To Uninstall AssetExplorer from Linux

1. Go to `<AssetExplorer>/_uninst` directory.
2. Execute uninstaller.bin as below:
   $ ./uninstaller.bin
Registering AssetExplorer

Once our trial evaluation period is over, you need to register the AssetExplorer application. To purchase the application, please contact sales@manageengine.com. They will send you the registered license file. Using this license file, you can register the AssetExplorer application.

To register AssetExplorer,

1. Log in to the AssetExplorer application using the user name and password of an admin user.
2. Click the License link available at the right top of the application. The License window is opened.
3. Click the Browse button to locate the license file sent to you when you purchased the application.
4. From the file chooser window, select the license file and click Open.
5. Click Upgrade.

The registration of AssetExplorer application is complete. You can continue using the application.
Contacting ZOHO Corporation

- ZOHO Corporation
- Sales
- Technical Support

ZOHO Corporation

<table>
<thead>
<tr>
<th>Web Site</th>
<th><a href="http://www.zohocorp.com">www.zohocorp.com</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>ZOHO Corporation</td>
<td>ZOHO Corporation 4141, Hacienda Drive Pleasanton, CA 94588, USA Phone: +1-925-924-9500 Fax: +1-925-924-9600</td>
</tr>
<tr>
<td>ZOHO Corporation Private Limited</td>
<td>ZOHO Corporation Private Limited DLF IT Park, Block 7, Ground floor, No. 1/124, Shivaji Garden, Nandambakkam Post, Mount PH Road, Ramapuram, Chennai 600 089, INDIA, Phone: +91-44-22707070 Fax: +91-44-22707172 E-mail: <a href="mailto:info@zohocorp.com">info@zohocorp.com</a></td>
</tr>
</tbody>
</table>

Sales sss

For purchasing ManageEngine AssetExplorer from any part of the world, fill out the Sales Request Form. A sales person will contact you shortly. You can also send us e-mail at sales@manageengine.com.

You can also call the ZOHO Corporation headquarters at the following numbers:

Phone: +1-925-924-9500
Fax: +1-925-924-9600 and request for Sales

Technical Support

One of the value propositions of ZOHO Corporation to its customers is excellent support. During the evaluation phase, the support program is extended to users free of charge.

For support, please mail to assetexplorer-support@manageengine.com

Alternatively, you can submit your feedback from the AssetExplorer product by clicking the Feedback link at the top right corner just above the header tabs after logging in to the application. Your feedback will be sent to the AssetExplorer Support Team and they will get in touch with you. Do not forget to provide your e-mail ID or your contact information for the team to get in touch with you.
Home

The home page for all users of AssetExplorer has various useful information displayed that enables an administrator, a technician, and a requester to take necessary action. Based on the login credentials of the user, the following are available in home page,

1. Dashboard
2. Quick Links
3. Create New
4. Scan drop down
5. Search field
6. Assets
7. Personalize
8. Feedback

Quick Links drop down

Quick Links is a quick navigator to instantly view All Workstations, Workstations In Store, Unaudited Workstations, Managed Software, Prohibited Software, Manage Groups, Create Group, configure Notification Rules and view All Relationships.
Create New drop down

The Create New drop down is a quick navigator to create new CI, Asset/Component, Workstation, Server, Software License and License Agreement, Purchase Order, Contract, User, Product and Vendor.
Scan drop down

Scan all your Windows Domain, machines such as Linux, MAC, Solaris, AIX machines that are part of your network, and IP based IT assets instantly using the Scan drop down.

Search Field

You can conduct an effective search operation for Resources, Workstations/Servers, Users, Software, Purchase, Contracts and CIs from the home page. Say, for instance, you wish to search for a User, Jake Thomas, then select Users from the drop down and enter the keyword as "Jake Thomas". Click Go to redirect the page to the Requesters list view page.

Consider another instance for conducting a search for the search string "admin" under All CIs. The search operation would result in CIs beginning with the word admin, such as, Administrator, Administration, Admin and users under the department Administration.
Assets

From the Assets block, you can at once navigate to the list view page of assets, components, software and groups.

![Assets Block]

Personalize

You can change the language displayed in the application, set the default date and time, and change your password from the Personalize link.

![Personalize Link]

Feedback

Send a feedback immediately to our support team from the application. Click here to know how to go about sending it.

![Feedback Link]
Dashboard

The dashboard of AssetExplorer login home page displays the following,

- All My Assets
- Workstations
- Softwares
- PO & Contracts

All my Assets

- On scanning all the IT & Non-IT assets in the organization, all the assets gets listed below in All my Assets.
- You can view the graph of resources by Site, Region, State or Asset Summary.
- Click View All link to view the graph enlarged.
- The Asset Summary displays each product type count across organization (Workstation, scanner etc.).
- It also displays number of failed workstations on scanning at the bottom of the section. Click the Troubleshoot link for troubleshooting tips.
Workstations

- On performing a scan, the **Workstations** shows the graph of Workstations by OS, Domain, Manufacturer, Processor Type, Department, Site, Region, State and so on.
- Click **View All** link to view the graph enlarged.
**Software**

- On performing a scan, the Software shows the graph of Software by category, Software licensing status, Software license Compliance, Software Vendors Volume etc.
- Click **View All** link to view the graph enlarged.

**Purchase & Contracts**

- PO & Contracts shows the graph of contract summary and purchase order summary.
- Contracts summary shows the graph for contracts expiring in next 7 days, 30 days, also contracts expired in last 30 days.
- Purchase Order summary shows the graph for purchase due today, next 7 days & next 30 days.
- Click **View All** link to view the graph enlarged.
Personalize

You can localize your personalization such as display language, data and time zone, as well as change your login password using this option. Apart from the option of changing password from the user management configurations, you can also change your individual password.

1. Click **Personalize** link.

![Personalize Link](image)

2. The Personalize page opens to view the **Personalize** and **Change Password** tab. By default, the Personalize tab is displayed.

**Personalize**

The personalize tab consists of display language, data and time format.

- **Display Language** Select the default display language in the application from the **Choose Language** drop down. All the data will be in the selected language.

- **Date/Time Format** Select the format of the date such as, Tue 4 Feb 2010, from the **Set Date Format** drop down. Similarly, you can also set the time format from **Set Time Format** combo box. The selected date and time format will be displayed wherever date/time is considered. **For example:** While creating a request, the request created on and due by time is displayed in the selected date and time format corresponding to the selected time zone. The same can be viewed under Problem, Change, Solution and Purchase modules.

Click **Save**.

**Change Password**

1. Click the **Change Password** tab in the personalize page.
2. Enter your old password in the **Current Password** field.
3. Enter your new password in the **New Password** field.
4. In the **Confirm New Password**, enter the new password again.
5. Click **Save** button.
Feedback

You can send a feedback regarding the product instantly to our support team. To send a feedback,

1. Click **Feedback** link. This opens the Feedback pop up window.

![Feedback Pop Up](image)

2. In the Feedback pop up, the **To** address is our support mail id and is in non-editable format.
3. Specify **Your Name**, **Your Email Id**, the **Subject** and **Message** mail content in the respective fields.
4. Click **Submit** button.
Scanning Workstations and Other Network Devices

With AssetExplorer you can scan all your windows domain, networks part of your enterprise, Linux, MAC, Solaris, AIX machines and IP based IT assets. Also, you can set up audits for scheduling periodic scanning and regular cleanup, scan assets in remote locations and perform individual scan for newly added workstations.

| Note | 1. Please note that, only technicians with administrator privilege can perform and configure a Scan.  
|      | 2. AssetExplorer currently supports scanning for the following OS - Windows, Linux, Solaris, MAC, IBM-AIX and IP devices - Printers, Routers, Switches and Access Points. |

Scanning Mechanisms

- **Windows Domain Scan**  
  Scans all the Windows Workstations and Servers that are,  
  a. part of Windows domain  
  b. scanned using Active Directory, and  
  c. part of Windows workgroup

  You can also scan workstations using an Agent or Agentless mode (scans machines using WMI).

- **Network Scan**  
  Scan workstations and devices that are part of your network range. Network Scan supports,  
  a. OS workstations like, Linux, MAC, Solaris, IBM-AIX machines  
  b. Windows workgroup (workstations that are not part of any domain controller).  
  c. IP devices like Printer, Router, Switches and Access Points.

- **Schedule Scan**  
  Schedule scan at periodic intervals to scan domains and networks that are part of your enterprise. Also, you can set re-scanning intervals to discover newly added workstations.

- **Scanning machines outside a domain/network**  
  Scan Windows Workstations and Servers outside a domain/network using Standalone Workstation Audit or by installing an Agent in the remote machine. Both these methods involves script installed in the remote workstations which scans and pushes the inventory details to the AE server.

- **Workstations/Device Scan**  
  Use this option to scan an individual or newly added machines in your network. Machines like Windows, Linux, Solaris, IBM-AIX, MAC and IP devices like Printers, Routers, Switches and Access Points are currently supported.

- **Distributed Asset Scan**  
  For all your remotely located workstations that cannot be accessed by the Central AE server, a Remote AE server is installed in each location which scans the workstation information, and pushes the data to the Central AE Server either manually or automatically.
Scanning Windows Machine

AssetExplorer provides you various options to scan your Windows machines. You can scan machines that are part of a domain, network, workgroup and even schedule to scan the windows machines. Apart from this, you can scan remotely located Windows machines and workstations that are manually entered in the application.

Scanning Mechanisms

- Types of Scan
- Modes of Scan

Types of Scan

The list below shows the different methods through which a Windows machine can be scanned:

- Windows Domain Scan - Scan all the Windows Workstations and Servers that are part of Windows domain and Windows workgroup. By default, when you start the application for the first time, the Windows domain in the network are automatically discovered.
- Network Scan Windows workstation that are part of a network can be scanned using the Network Scan. The communication protocol and login credentials for windows workstations are given below,
  a. Communication Protocol: WMI or Agent
  b. Login Credentials: Credentials of the domain controller
- Scanning machines outside a domain/network The Windows workstations/servers that are not part of a domain or network are scanned using Standalone Workstation Audit or by installing an Agent in the remote machine. The remote workstations are scanned using a script and the inventory details are pushed to the AE Server.
- Workstation/Device Scan Scan your newly added windows machines by specifying the workstation/device credentials.

Modes of Scan

- Agent Mode Agent based scanning involves an agent to be deployed in Windows workstations through Active Directory or Windows Domain Scan. deployed manually or from the AssetExplorer Application. The Agent mode is easy to deploy, more secure and provides easy access for remote control.
- Agentless Mode Agentless mode uses a built-in agent such as Windows Management Instrumentation (WMI) installed in each Windows machines. The AssetExplorer server should be installed in a Windows machine to scan Windows workstations and servers.
Modes of Scan: Agent and Agentless

With the evolution of network discovery solutions in recent times, two technologies have emerged into existence - Agent and Agent-less mode of scan. While Agent-less scans inventories using WMI (Windows Management Instrumentation) and does not involve any client side software installed in the host, the Agent is an instance of a software, installed in the host to scan inventories and access them remotely.

ManageEngine AssetExplorer supports both, Agentless and Agent modes to scan all your Windows workstation and servers.

This section will cover the following topics:-

- Agent Mode
  - Methods of Deployment
  - Uninstalling Agent
- Agentless Mode
Agent Mode

For a wide spread organization with a complex network infrastructure, the Agent based scanning is most effective and provides easy deployment, more security and low bandwidth.

The application provides an agent, which can be deployed in the network workstations through various methods. [Refer Methods of Agent Deployment]. Once the agent is deployed in the network workstations, it scans all the workstations and provides easy access for remote assistance.

The following topics are discussed in this section:-

- Agent Settings
- Agent Configuration in AssetExplorer application
- Delta Scan
- Pros and Cons of Agent mode

Agent Settings

Choose to scan all your Windows workstations in both, Agent and Agentless mode by selecting the corresponding option from Agent Settings under the Admin tab. If you have enabled Agentless mode, the Windows workstation and servers are scanned using WMI. If you have enabled both the modes, the agent based scanning is performed and if that fails, the agentless scanning is performed.

1. Windows is the only Supported Platform for Agent.
2. The Ports used in Agent based Scanning is TCP 9000.

Agent Configurations

For a successful scan, the agent should communicate with the AssetExplorer server. The server details are configured under Agent Configurations. By default, the server in which the application is installed is populated as the server details.
You can modify these configurations to create your own Agent Configurations.

- **Server Name**: The server name or IP address of the computer where AssetExplorer is installed. The agent residing in the client computers communicates with the AssetExplorer server using this Server Name/IP address.
- **Server Port**: The port configured for the application.
- **Protocol**: The protocol used to communicate with the server.
- **Agent Port**: The port number of the agent.
- **Scan at System Startup**: On enabling this option, the agent scans the workstation on every startup.

Click **Create New Agent** button. Clicking on **Cancel** takes you to the agent settings page.

**Note:**

1. You can also modify the configurations to create your own Agent Configurations.
2. If the agent is installed in all the Windows machines and if any of the below circumstances occurs, the agent details can be updated using a script.
   a. AssetExplorer application is moved from one server to another or if the AE port or protocol (http or https) has been changed.
   b. If agent port needs to be changed in all the machines or enable/disable scanning on system startup.

This script can be run as a logon script in the Active Directory or manually in each machine to update the configurations in the agent. While executing the script, the parameters should be in the format "-servername <AE server name> -port <AE port> -protocol <http or https >".

To download the script, please refer to the help card under Admin -> Agent Settings.
Delta Scan

While performing a scan (Domain scan or Scheduling a scan) through Agent or Agentless mode, some amount of data is obtained in the AssetExplorer Server. The data obtained in the AE Server through an Agent scan is comparatively minimal to that of Agentless. The agent transfers only the changes ("delta") that occur between two subsequent scans to the server, and automatically strips out any unchanged data, thus reducing the data transfer to 1 - 2kb instead of the usual 20 - 30kb.

Pros and Cons of Agent Mode

Agent based scan Pros:

1. Only one port is required during scan, which can be configured under Admin -> Agent settings -> Agent Configuration -> Agent Port.
2. Performs scan on system boot up and pushes the data to AE application.
3. The data transfer in agent scan is very minimal compared to agentless scan and even more less when compared to delta scan (difference in data between two subsequent scans is fetched).
4. Quick access to the remote machine on performing Remote Control.
5. Easy to deploy agent through active directory.
6. Dependencies over DCOM and RPC settings are eliminated.
7. Once the agent is installed in all the machines, you can scan those machine from linux server.

Agent based scan Cons:

1. Agent should be upgraded if the version is changed. This can be performed from the Active Directory.
Methods of Agent Deployment

If you have enabled Agent Mode, you can deploy the agent in the Windows machine through any of the methods given below,

Agent Deployment Methods

AssetExplorer installed in Windows server:

1. Import from Active Directory logon script
2. AssetExplorer Application
   • Bulk Deployment of Agent
   • Upgrading the Agent
   • Installing Agent in individual machine
3. Manual Installation of Agent
4. Installing Agent through PsExec utility

AssetExplorer installed in Non-Windows server:

1. Import from Active Directory logon script
2. Manual Installation of Agent
3. Installing Agent through PsExec utility
4. Configuring Agent details using Orca editor
AssetExplorer installed in Windows server

If AssetExplorer is installed in a Windows server, then you can deploy the agent using the following methods,

1. **Import from Active Directory logon script**
2. **Deploying Agent from AssetExplorer Application**
3. **Manual Installation of Agent**
4. **Installing Agent through PsExec utility**

**Method #1: Import from Active Directory logon script**

An instant method to push the agent in all the Windows machine within a domain is through Active Directory logon script. Instead of providing permission to all the scanned workstations for file transfer, the agent is installed once the user logs into the machine. In addition, the agent can be deployed to all the newly added workstations automatically on scheduling an AD Import.

To install the agent from Active Directory,

1. Create a network share like, `\MyServer\MyShare`
2. Click Download Agent and run the agent.msi file.
3. Save the agent and the script in the network share.
5. In the console tree, right click on your domain, and select Properties.

7. Right click on the name of domain or the Organizational unit for which you would like to configure the script. Click **Create and Link a GPO Here...** option.

8. Type a name for the new GPO say, AGENT DOWNLOAD and click **Ok**. The GPO is added to the existing list.

9. Right click on the newly created GPO and click on **Edit** option.

10. In the new window go to the **User Configuration** -> **Windows settings** -> **scripts** -> double click Logon.

11. In the new Logon Properties window click on **Add**. Now Browse and select the script "\MyServer\MyShare\InstallAgent.vbs". The script should be accessible by the target workstations.
12. Specify the Script parameters as msi file name with path (eg. \MyServer\MyShare\ManageEngineAssetExplorerAgent.msi) and click Ok.
13. Close the Group Policy Window and click Ok.
15. When the client computer starts the agent is automatically installed.

**Note**

1. The agent can be deployed to all the Windows Workstations and Servers within the domain.
2. The agent is deployed when the user logs into the machine.

**Method #2: Deploying the Agent from AssetExplorer Application**

Apart from Active Directory which involves deployment of agent in workstations of a particular domain, you can deploy agents in workstations that are part of a network group or workgroup from the AssetExplorer application. You can choose to deploy the agent as a bulk or in individual machines.

**Configurations essential to deploy the agent from the AE application**

1. Scan the workstations using the Scanning Prerequisites.
2. After a successful scan, enable "File and Printer share" on executing the command (given below) in the command prompt of the workstation to install the agent.
   ```bash
   netsh firewall set service FILEANDPRINT
   ```

**a. Bulk Deployment of Agent**

1. From the Workstation Configuration page, click on Agent Details link. The workstations for which the agent is not installed is listed.
2. Select the check box beside the workstations for which the agent should be installed.
3. Click Install Now. The agent is installed in the selected workstations.

**b. Upgrading the Agent**

In certain cases, the agent installed in the workstation may be of an older version. You can upgrade to the latest agent version from the AE application,

1. Select Agent with older version from the Filter drop down.
2. Select the check box beside the workstations for which the agent should be upgraded.
3. Click Upgrade.
c. Installing Agent in Individual machine

In credentials for Agent Installation page,

- **Name/IP**: Enter the workstation name or the IP address of the workstation for which the agent should be installed.
- **Login Credentials**: Select the login credentials as either Global or Local. Global credentials are common login permissions for all the assets. Local credentials are private login permissions for an asset.
- If you have enabled Local Credentials, specify the login credentials to your machine.

If you have enabled Global Credentials

- **Scan Type**: Specify the scan type as Domain mode/Network mode under which the workstation is configured.
- **Domain Name**: Select the Domain name/network under which the workstation is configured.
- **Login Name & Password**: Specify the domain credentials.

**Method #3: Manual Installation of Agent**

To download and install the agent as a service.

1. Click **Download Agent** button.
3. Click **Next >**.
4. Choose the **Installation folder** name under which the Agent must be installed. By default, the folder name is specified as C:\ManageEngine\AssetExplorer directory.
If you want to change the installation directory, then, click the **Browse** button beside the directory path. From the file chooser window, choose the directory of your choice and click **Ok**.

5. Click **Next >**.

6. The next step is **Agent Configurations**, if you have not yet configured the agent, you can specify the server details and agent settings. Click **Next >**.

7. You also have an option to enable scan when ever the **system starts up**. Click **Next** to install the agent.

### Method #4: Installing Agent through PsExec Utility

You can install agents through PsExec utility in Windows Workgroup.

1. Download the PsTools.
2. Install the software in one of the Windows machine.
3. From the command prompt, go to the directory where the PsTools is installed.
4. Execute the command as given below, to install the agent on each computer listed in the file.

   ```
   psexec.exe @<file name> -u <domain name\user name> -p <password> msiexec /i <msi file name>
   ```

   **For example:**

   ```
   psexec.exe @ComputersList.txt -u WORKGROUP\administrator -p password msiexec /i "\ae-test1\msi\ManageEngineAssetExplorerAgent.msi"
   ```

### AssetExplorer installed in Non - Windows Server

If AssetExplorer is installed in a Non - Windows server say, Linux, you can still use the Agent Mode to scan Windows machines. But, you can neither configure the Agent details from Agent Settings page nor install and upgrade the agent from the linux server.

Some of the methods through which you can configure and deploy the agents are,

1. **Importing from Active Directory logon script**

2. **Installing Agent through PsExec utility**

### Method #1: Import from Active Directory logon script

To deploy the agent through Active Directory, use the logon script and provide additional parameters as given below,

```
<agent with directory name> <server protocol> <server ip> <server name> <server port> <agent port>
```

**For example:**

```\server\share\ManageEngineAssetExplorerAgent.msi http 192.168.112.153 assetexplorer 8080 8000
```

On entering the additional parameters, follow the steps as in Active Directory logon script.

### Method #2: Installing Agent through PsExec Utility

You can install agents through PsExec utility in Windows Workgroup.

1. Download the PsTools.
2. Install the software in one of the Windows machine.
3. From the command prompt, go to the directory where the PsTools is installed.
4. Execute the command as given below, to install the agent on each computer listed in the file.

```
psexec.exe @ComputersList.txt -u administrator -p Zoho123SDP msiexec /i <msi file name>
SERVERIP=<server ip address> SERVERNAME=<servername> PROTOCOL=<http or https> PORT=<port no> AGENTPORT=<agent port> SCANATBOOT=<0 or 1>
```

For example:

```
psexec.exe @ComputersList.txt -u WORKGROUP\administrator -p password msiexec /i \"\Linux_Agent.msi\" SERVERIP=199.1.1.1 SERVERNAME=assetexplorer PROTOCOL=http PORT=8080 AGENTPORT=9000 SCANATBOOT=1
```

Configuring Agent details using Orca editor

To configure the agent details, you need to modify the .msi file using Orca editor and then proceed with the installation. Once the parameters are configured, you can install the agent using Active Directory logon script or through PsExec utility.

1. Download the Orca editor.
2. Install the editor in one of the Windows machine.
3. Download the agent from AssetExplorer server and copy it to the Windows machine having the Orca editor.
4. Right-click the .msi file and select *Edit with Orca* option. The Orca editor window pops-up, listing all the tables on the left hand side.
5. Click *Property* table.
6. In the right panel, right-click and select *Add Row* option.
7. Enter the *property* as SERVERNAME and *value* as the name of the AssetExplorer server. Also, provide the following details:

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERVERIP</td>
<td>IP Address of the AssetExplorer Server</td>
</tr>
<tr>
<td>PORT</td>
<td>Port No. of the AssetExplorer Server</td>
</tr>
<tr>
<td>PROTOCOL</td>
<td>Protocol used by the server, whether it is http or https.</td>
</tr>
<tr>
<td>AGENTPORT</td>
<td>Port No. of the Agent. This port should be open in the Windows machine to install the agent.</td>
</tr>
</tbody>
</table>

8. **Save** the provided details.
9. **Close** the editor and proceed with the installation.
Un-installing the Agent

You can manually un-install the agent from Add/Remove Programs or from the Asset Explorer application. If you are unable to un-install the agent from the Control Panel then follow the steps below,

1. Click on Workstations link from the Resources block.
2. From the Workstation list view page, click on Agent Details link. By default, the workstations for which the agent is not installed is listed.
3. Select the options either Agent with older version or Agent installed Workstations from the Filter drop down.
4. Select the check box beside the workstations to un-install the agent.
5. Click Un-install button. The agent is removed from the selected workstations.
Agentless Mode

As the name suggests, the Agentless mode does not involve any client side software installed in the host. Instead, the agentless mode uses a built-in agent such as **WMI (Windows Management Instrumentation)** installed in each Windows machines to scan the inventory details and to access the workstation remotely.

The agent-less mode is most appropriate for small organization where the network is less complex and does not involve installing, upgrading and maintaining an additional software program on each machine.

Credentials for Scans

**Note:** Please note that the agent-less supports only 'Windows' platform.

<table>
<thead>
<tr>
<th>Communication Protocol</th>
<th>Login Credentials</th>
<th>Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMI (Supports only Windows platform)</td>
<td>Credentials of Domain Controller.</td>
<td>TCP 135, 445 and one random port greater than 1024.</td>
</tr>
</tbody>
</table>

Configuring RPC and DCOM Settings

The accessibility of the data using WMI is controlled by the RPC and DCOM settings which should be configured in the workstations.

For Windows Firewall and DCOM option

1. Download the file `scan_setup.txt`
2. Copy the file as "scan_setup.vbs" in the target workstation.
3. Execute the script using Cscript from command prompt as follows: `DIR_OF_SCRIPT_FILE>CSCRIPT scan_setup.vbs`
4. Restart the Workstation.

**NOTE:** This script can also be configured as Logon Script in the Domain Controller, to configure Firewall for all computers in the domain. Click here to know more.

Pros and Cons of Agentless mode

**Agentless scan pros:**

1. Does not involve an agent to be installed, upgraded and maintained in each workstation.

**Agentless scan cons:**

1. The DCOM and RPC settings should be configured.
2. More number of ports used when compared with agent mode.
3. AssetExplorer server should be installed in a Windows machine to scan windows workstations/servers.
Scanning Linux, Solaris, MAC and AIX machines

Apart from scanning Windows machines, AssetExplorer scans workstations/servers of other Operating Systems such as Linux, Solaris, MAC and IBM-AIX.

There are two methods through which these machines can be scanned in AssetExplorer application,

- Network Scan - Scan workstations/servers that are part of your network.
- Workstation/Device Scan - Scan your newly added machines by specifying the workstation credentials.

Ports and Credentials to perform scan for these machines are,

<table>
<thead>
<tr>
<th>Communication Protocol</th>
<th>Login Credentials</th>
<th>Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telnet</td>
<td>Telnet Credentials</td>
<td>23</td>
</tr>
<tr>
<td>SSH (Secure Shell)</td>
<td>SSH Credentials</td>
<td>22</td>
</tr>
</tbody>
</table>

Click here to know more on ports used for scan.
Scanning Printers, Routers, Switches and Access Points

AssetExplorer currently supports the scanning of IP devices namely, Printers, Routers, Switches and Access Points.

There are two methods through which these devices can be scanned in the application,

- Network Scan - Scans devices that are part of your network.
- Workstation/Device Scan - Scan your newly added devices by specifying their credentials.

**Note:** Please note that AssetExplorer does not scan other IP devices like Firewall, Hubs, IP Telephones and so on.

**Ports and Credentials to perform device scan**

<table>
<thead>
<tr>
<th>Communication Protocol</th>
<th>Login Credentials</th>
<th>Port</th>
<th>Service Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNMP (Simple Network Management Protocol)</td>
<td>SNMP Credentials</td>
<td>161</td>
<td>Fetches and Identifies the IP devices.</td>
</tr>
<tr>
<td>SSH (Secure Shell)</td>
<td>SSH Credentials</td>
<td>22</td>
<td>Fetches additional information on Routers and Switches.</td>
</tr>
</tbody>
</table>

Click here to know more on ports used for scan.
Windows Domain Scan

You can configure and scan all the available Windows Workstations and Servers in your domain network using ManageEngine AssetExplorer. When you set up the AssetExplore application and start it for the first time, the application automatically discovers all the available Windows domain in your network.

Apart from this, you can scan all the windows workstation and servers that are,

- part of Windows domain
- scanned using Active Directory, and
- part of Windows workgroup.

To discover workstations in a domain,

- Select a Domain and enter the domain controller and login credentials for the domain controller.
- Select the Organizational Units (OUs) from the list.
- The workstations in the OUs are retrieved, enumerated and scanned (ten workstations are scanned simultaneously)
- The machines in the specified domain then is Pinged.
- If the machine responds to the ping, scan the inventories (hardware/software information) in the machine using Agent or Agentless mode.

The Windows Domain Scan page can be access in two ways,

a. Scan drop down  
b. Admin Tab

Scan drop down

The Scan drop down is a quick navigator to instantly access the Domain List page.
Admin Tab

1. Click **Admin** tab in the header pane to open the configuration wizard page.

2. Click **Windows Domain Scan** icon under **Discovery**. The Domain list view page opens where you can add, edit, delete and scan a domain.

Add a New Domain

If you find that there are some domains that are missing in the list, then you can add those domains manually.

1. Click on **Add New Domain** link.
2. Enter the **Domain Name**. The name should be unique to identify the domain and is a mandatory field. Say, Acme.
3. If you want the domains to be displayed in the login screen when Active directory Authentication is enabled, select the check box beside **Public Domain**. Else un-check the Public Domain check box to list the domain as **Private Domain**.
4. Enter the **Domain Controller** name for the Active Directory Server. The organizational units are listed only if the domain controller name is provided. **Note:** Please note that for scanning **Windows Workgroup**, the domain controller should be blank. And, the ports to connect to Active Directory is **TCP 389**.
5. Specify the Login Credentials for the domain controller in **Username** and **Password** fields.
6. If you wish to add any description for the domain, enter it in the **Description** text box.
7. Click **Save**. The domain is listed in the domain list view page.

Click **Save and Scan now** button to save and scan the domain immediately. Clicking on **Cancel** button takes you back to the list view.

<table>
<thead>
<tr>
<th>Note</th>
<th>For the workstation scan to execute successfully the following things need to be true:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a. WMI should be enabled in the workstation where the Asset Explorer server is running.</td>
</tr>
<tr>
<td></td>
<td>b. COM/DCOM service should be switched on in all the workstations belonging to the windows domain.</td>
</tr>
</tbody>
</table>

Scanning a Domain

1. Click **Scan Domain** icon of the domain to be scanned from the Domain list view page.
2. Choose the **Organizational Units** for which you want to import the workstations by enabling the check box.
3. Select the **Site** to associate the scanned workstations from the **Choose Site** option. This option is available only if the sites is specified
4. Click **Start Scanning** button to start the scanning process. You will get the complete reports of the scan, with successful and failed workstation list.
Editing a Domain

1. Click on the Edit icon beside the Domain Name you wish to edit.
2. In the Edit Domain form, you can modify the name of the domain, login name, password, and description of the domain.
3. Click Save to save the changes performed. Click Save and Scan now button to save and scan the domain immediately. At any point, if you wish to cancel the operation that you are performing, click Cancel.

Deleting a Domain

1. Click the Delete icon beside the Domain Name you wish to delete. A confirmation dialog is opened.
2. Click OK to proceed with the deletion. The domain gets deleted from the list. If you do not wish to delete the domain, then click Cancel.
Network Scan

With Network Scan you can discover all the Linux, Solaris, MAC, IBM-AIX machines and devices such as Printers, Routers, Switches and Access Points that are part of your network. In addition, you can also scan Windows machines and Workgroup (Windows machines that are not part of a domain).

To discover workstations in a network,

- Enter the Network Range to scan.
- The workstations and devices in the network are retrieved, enumerated and scanned (ten workstations are scanned simultaneously)
- The machines in the specified range is Pinged.
- If the machine responds to the ping, scan the inventories (hardware/software information) in the machine. Use SSH or Telnet for Linux, Solaris, MAC, IBM-AIX machines, SNMP for Printers, Routers, Switches and Access Points, WMI for windows machines.

The Network Scan page can be accessed by two ways in AssetExplorer application,

a. Scan drop down
b. Admin Tab

Scan drop down

The Scan drop down is a quick navigator to instantly access the Network Scan page. From the Scan drop down select Network Scan option.

Admin Tab

1. Click the Admin tab in the header pane to open the configuration wizard page.
2. Click Network Scan icon under Discovery block. The Network list view page opens where you can add, edit, delete and scan a network.
 Ports and Credentials to scan machines using Network Scan

- Linux, MAC, Solaris, IBM-AIX
  Communication Protocol: Telnet or SSH
  Login Credentials: Telnet Credentials
  Port for Telnet: 23
  Port for SSH: 22
- Printers, Routers, Switches, Access Points
  Communication Protocol: SNMP + SSH (devices are identified and fetched using SNMP. If SSH credentials is provided, additional information on routers and switches can be fetched)
  Port for SNMP: 161
  Port for SSH: 22
- Windows Machines
  Communication Protocol: WMI or Agent
  Login Credentials: Credentials of the domain controller

Add New Network

**Linux, MAC, Solaris, IBM-AIX**

1. Click **Add New Network** link.
2. Enter the **Network Address**. You can either scan the **Entire Network** say, all workstations under 192.168.27.0 or particular **Range of Network** say 192.168.27.0 to 192.168.27.30 by clicking the corresponding options.
3. Select the **Protocol** say, SSH or Telnet.
4. If license softwares are installed in Linux and Solaris machines, enable **Scan Softwares in Linux and Solaris workstations** check box.
5. If you have enabled SSH, enter the SSH login credentials. If you have enabled Telnet, enter Telnet Credentials in the **Login Name** and **Password** fields.
6. Provide any relevant information pertaining to the network details in the **Description** field.
7. Click **Save**. Click **Save and Scan now**, to save and scan the workstations in the specified range.

**Printers, Routers, Switches and Access Points**

1. Click **Add New Network** link.
2. Enter the **Network Address**. You can either scan the **Entire Network** say, all workstations under 192.168.27.0 or particular **Range of Network** say 192.168.27.0 to 192.168.27.30 by clicking the corresponding options.
3. If the **Protocol** is SSH, enable the corresponding radio button.
4. If SSH is enabled, enter the SSH **Login Credentials** which provides additional information on routers and switches.
5. For SNMP discovery of network devices enter the **Community String**. SNMP is used for identification of printers, routers, switches and access points. In case of printers the complete inventory is being fetched using SNMP. In case of routers and switches basic inventory is being fetched using SNMP and a more detailed inventory is done using SSH or telnet (if credentials are provided).
6. Provide any relevant information pertaining to the network details in the **Description** field.
7. Click **Save**. Click **Save and Scan now**, to save and scan the devices in the specified range.
Windows Machine

1. Click Add New Network link.

2. Enter the Network Address. You can either scan the Entire Network say, all workstations under 192.168.27.0 or particular Range of Network say 192.168.27.0 to 192.168.27.30 by clicking the corresponding options.

3. Enter the Login Credentials of the domain controller in the Login Name and Password fields. The login Name should be provided as <DOMAIN_NAME>/<USER_NAME>. For instance, ACME/administrator

4. Provide any relevant information pertaining to the network details in the Description field.

5. Click Save. Click Save and Scan now, to save and scan the workstations in the specified range.

Scan Domain

1. From the Network List View page, click Scan Network icon.

2. If your organization is distributed across various sites, select the Site to which the workstations/devices are associated.

3. Click Start Scanning. Once scanned, you will get the complete report on the success and failed workstations of the scan.
Edit Network

1. From the Network List View page, click the **Edit** icon of the network to be edited.
2. Edit the network details and **Save** the changes. Click **Save and Scan now**, to save and scan the workstations in the specified range.

Delete Network

1. From the Network List View page, click the **Delete** icon beside the network to delete.
2. A confirmation message on the delete operation appears. Click **Ok** to continue. The network is deleted from the list.
Workstation/Device Scan

If a new workstation/device is added in your network, and you wish to scan only the newly added workstation instead of the entire network, you can specify the workstation/device credentials and scan.

You can scan workstations/devices using Global Credentials or Local Credentials. Global Credentials are common login permission for all assets which can be scanned with Domain mode or Network Mode. Local credentials are private login permissions i.e., login permission to the workstation/device to be scanned.

Note: Local Credentials are generally selected for scanning devices such as servers and routers which needs private or local user name and password.

The Workstation/Device Scan can be access by two ways in AssetExplorer application,

a. Scan drop down
b. Asset Tab

Scan drop down

Click Scan drop down -> Workstation/Device Scan option. The Scan drop down is a quick navigator to instantly the Scan configuration page.

Asset Tab

1. From the Resource block, click any one of the IT Assets.
2. Click New Scan button to open the Scan Configuration page.
3. Specify the Name or IP address of the workstation to be scanned. This field is mandatory as the workstation in the network is identified with the Name or IP address.
4. Select any one of the credentials by enabling the radio button.

Global Credentials

1. Select the Scan Type from the drop down. The scan type can be either Domain Mode (if the workstation is Windows) or Network Mode.
2. Choose the Domain Name/Network from the drop down. If the domain/network is unavailable in the list, you can add a new domain/network using the Add New link. [Refer Network Scan to add a new network].
3. Specify the **Login Credentials** for the Domain/Network in the Login name and Password field.

4. If you have selected Network Mode to scan a device, enter the **Community String** of the device in the field provided.

5. Click **Scan**. The workstation/device is scanned and the information is obtained.

**Local Credentials**

1. Specify the **Login Credentials** for the workstation/device in the Login Name and Password field.

2. Select the communication **Protocol** as SSH or Telnet for workstations like Linux, Solaris, MAC, AIX and devices such as router, switches, access points and printers.

3. If license softwares are installed in Linux and Solaris machines enable **Scan softwares in Linux and Solaris workstations** check box.

4. Click **Scan**.
Scanning Machines outside a domain/network

All Windows workstations/servers that are not part of a domain/network are scanned using Standalone Workstation Audit or by installing the Agent in the remote machine. Both the methods involve a script installed in the remote workstations which scans and pushes the inventory details to the AE server.

Method #1: Standalone Workstation Audit

Scanning remote workstations involves two simple steps,

1. Download the ae_scan.vbs script from AssetExplorer application and execute the script in the workstation to be scanned.
2. On executing the script a XML file is generated. Import the XML file into the AssetExplorer application. You can see the standalone workstation details in the list view.

The script can also be configured as Logon/Startup script in the Domain Controller.

Accessing Standalone Workstation Audit configuration

The standalone Workstation Audit can be accessed by two ways in the application,

a. Scan drop down
b. Admin tab

Scan drop down

Click Scan drop down -> Standalone Workstation Audit option. The Scan drop down is a quick navigator to instantly the Scanning Windows Workstation through WMI Script page.

Admin Tab

1. Click Admin tab in the header pane to open the configuration wizard page.
2. Click Stand Alone Workstation Audit icon under Discovery block.
3. Click the **Click to Download** option to download the ae_scan.vbs script. Save the file.

4. Open the command prompt. Change the directory to the folder where the script is saved and execute the following script. **CSCRIPT ae_scan.vbs**

5. On executing the script, a XML file is generated in the same folder.

6. Import the XML file to the application and **Submit** it.

```
Scanning Windows Workstations through WMI Script:

Executing the below script in remote workstations will scan the workstation and push the inventory details to AssetExplorer server. The script can also be configured as Login/Startup script in Domain Controller.

Stand alone workstation audit:

Upon executing the script, an xml file (<workstationname>_xmldata.xml) with scanned data will be generated in the same folder. In case the server cannot be reached from the remote workstation, the generated xml file has to be copied to the server using a web drive, floppy etc for importing the data. [Click here to import].

Steps for executing the script:

1. Click on the Download link below and save the target/link as "ae_scan.vbs".

2. Open a command prompt. Move to the folder where the script file is saved and execute the command as shown below:

   CSCRIPT ae_scan.vbs

3. Executing the script will push the data to AssetExplorer Server. If server is not reachable from the remote workstation, the generated xml file can be imported from here.

```

7. On importing the XML file, the standalone workstation is scanned and gets listed in the Workstation list view page.

**Method #2: Installing Agent in the remote machine**

The Windows workstations/servers that are not part of the domain/network can also be scanned using the **Agent**. The steps involved to scan machines outside a domain/network,

1. Install the agent in the remote machines with "**Scan on system startup**" option enabled.

2. Make sure your AssetExplorer server is on a **public IP** to accomplish this process.

3. **Restart** the remote machine. The system is scanned and the xml is pushed to the AssetExplorer server.
Ports used during Scan

The various ports used during the scan and remote control is illustrated with the help of a diagram below,

Note: ICMP echo and ICMP echo reply should be allowed in the firewall, as this is used to ping the target machines. If the target machine has non-English OS, port TCP/7 needs to be added in the exception list of the firewall.
Scanning WAN environment

For a Wide Area Network (WAN) such as an organization distributed across various geographical locations, two methods of scanning mechanism can be put to practice

- Distributed Asset Scan This method involves a Remote AE server to be installed in each geographical location to scan and maintains all the workstations, and user information of the respective sites. The data from the Remote AE Server is pushed to the Central AE Server either manually or by scheduling the data periodically.
- Open the Firewall ports between the sites. To know more on this section refer Ports used for scan.
Schedule Scan

With Schedule Scan, you can schedule periodic scanning of your domain/network, enable regular cleanup of scanned information and set re-scanning interval for scanning workstation.

To access the schedule scan configuration page,

1. Click on the **Admin** tab in the header pane to open the configuration wizard page.

2. Click **Schedule Scan** icon under **Discovery** block. The Schedule Scan form opens.

Enabling Schedule Scan

Select **Enable Scheduled Scan** check box to configure regular scanning of the workstations. Select any of the 5 radio buttons below:

- **Scan Once** Select the date on which you want to scan your network using the calendar icon. And set the time to scan on the chosen date.
- **Daily Scan** Select the time (hours and minutes) from the combo box to scan workstations on a daily basis. Then select the date from the calendar button to schedule scans.
- **Weekly Scan** In the weekly scan option, you can also choose to schedule a daily scan. Select **Everyday** checkbox to enable scan on all the days of the week. Or, select the check box beside a particular day of the week. Then set the time (hours and minutes) of the scan to start the scanning process on the selected day of the week.
- **Monthly Scan** In the monthly scan option select the check box **Every Month** to scan every month throughout the year. Or, you can also choose the months you want to scan by selecting the check box beside the name of the months. Also, you can choose to schedule a weekly scan by enabling the radio button **Day** and select the scanning day of the week from the drop down. Or, select Date radio button and select the date from the drop down. Finally select the time (hours and minutes) of the scan.
- **Periodic Scan** You can enter a random period of time to repeat the scan. Enter the number in the field provided. The scan will be performed on every specified nth day. Where n is the number you enter in the field. The default value is 7th day.

Scan History Clean up

You can enable regular cleanup of the scanned information, by selecting the **Enable Scan History Clean up** check box and specifying the number of days after which the scanned history information should be deleted.

**Note:** It is recommended to take a backup and clean up the scanned history periodically to enhance AssetExplorer performance.
Checking for Newly Added workstations

You can schedule a scan to fetch all the newly added workstations in the domain/network. For this, you need to select **Check for newly added workstations** check box and enter the number of days when the periodic re-scan of your domain/network should be performed.

**Note:** Please note that only the newly added workstations are scanned and not the other workstations in the domain/network.

Click **Save**, to save the details. Click **Reset** button to reorganize the settings.
Distributed Asset Scan

In a wide spread organization distributed across various sites, the Central AE Server may not be able to access all the assets in sites. Hence, a Remote AE server is installed in each site which scans and maintains all the workstations, and user information of the respective sites. The data from the Remote AE Server is pushed to the Central AE Server either manually or by scheduling the data periodically.

Since there is a constant need to update the users and workstation information in the Central AE Server, you can automate the process by specifying the central server details in the remote server thereby synchronizing the two servers.

| Note | The same installation can be used as central server and remote server, there are no separate downloads. |

Methods to perform Distributed Asset Scan

**Manual**

1. Extract the data in a zip format from the Remote AE server and export it to the central server.
2. Import this zip file into the Central AE Server.

**Auto Synchronization**

1. Configure the Central Server details in Central Server Settings.
2. Select Export and Push data to Central Server now button. The data is automatically pushed to the central server provided the central server is reachable.
Asset Scan in Remote AE Server

The scanned information in the Remote AE Server can be updated periodically either manually or automatically in the Central AE Server.

Installing the Remote AE Server

You can install AssetExplorer as a Remote Server by choosing the server type as Remote AE Server on starting the application for the first time. The application gets started as the Remote AE Server.

Accessing the Configuration

1. Click the Admin tab in the header pane.
2. Click Distributed Asset Scan icon under Discovery block.

Methods to export the data

The data can be exported manually or pushed automatically in the Central AE Server.

Manual

1. Click on Export Data to export the asset data into a zip file.
2. A confirmation message appears. Click Ok to proceed.
3. If the data has be generated successfully, an Export Data box pops up.
4. Click on the link to download the zip.
5. Send the zip file to the central server location through E-mail or through some storage device.

Auto Synchronization

If the central server is reachable, configure the details of the central AE Server by clicking on Central Server Settings.

- **Server Name**: Enter the Server Name or IP Address of the Central AE Server.
- **Server Port**: The port where the Central AE Server is installed.
- **Server Protocol**: The protocol to connect the central server and the remote server. Say, Http, Https
- **Site**: Site where the Remote AE Server is installed. The site specified must be configured in
the central server so that the assets and users is associated to the appropriate site.

- **Username & Password**: Credentials of the Central AE Server.
- **Domain Name**: Specify Domain Name if Active Directory authentication is enabled in Central AE Server.

The Central Server may be connected through a proxy server. In this case,

- **Enable Is connected through Proxy Server** check box.
- **Proxy Server Name**: The Server Name or IP Address of the Proxy server.
- **Proxy Server Port**: The port of the proxy server.
- **Proxy Username & Password**: Credentials of the Proxy Server.

On configuring the Central Server Settings, you can export and push the data to central server automatically by clicking on **Export and Push Data to Central Server Now** button. The executed date, status of the operation and related comments is displayed in the List View.

**Schedule Pushing of data to Central AE Server**

You can schedule to push the data from the remote AE server to the central AE Server at periodic intervals.

1. Click on **Schedule to synchronize data with Central Server** link.
2. Select **Enable** radio button.
3. Select the number of days after which the data should be pushed to the central server.
4. Select the date from the calendar icon to start the process. Also select the **Time** in hours and minutes from the drop down.
5. If there is a failure in pushing the data to the central server, you can send a **Notify** to the technician. Specify the email address in the text provided.

**Importing data in Central AE Server**

**Installing the Central AE Server**

You can install AssetExplorer as a Central Server by choosing the server type as **Central AE Server** on starting the application for the first time. The application is started as the **Central AE Server**.

---

Choose AssetExplorer Server Type

<table>
<thead>
<tr>
<th>Central AE Server</th>
<th>Remote AE Server</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Central AE Server" /></td>
<td><img src="image2.png" alt="Remote AE Server" /></td>
</tr>
</tbody>
</table>

**Central AE Server**

Starting as central server will have the complete functionality of all the modules i.e. scanning your IT assets, complete asset life cycle management, purchase management, contract management and reporting.
Accessing the Configuration

1. Click the **Admin** tab in the header pane.

2. Click on **Distributed Asset Scan** icon under Discovery block.

3. Click **Browse** and locate the zip file of the scanned assets.

4. Select the **Site** of the remote server from the drop down.

5. Click **Import** button to import the data. On importing the data successfully you get a success message.
Remote Desktop Sharing

Certain tickets raised in AssetExplorer application may require technicians to access machines in remote locations. Say for instance, a SAP related issue in New York requires immediate attention and your support team is located in California. Likewise, when a request is raised via phone call, it would be great if your technician can access the requesters machine from his desk to resolve the issue instantly.

That is where Remote Desktop Sharing comes into play! Instead of launching a whole bunch of different softwares to access remote machines, AssetExplorer Remote Desktop Sharing helps you to access all your scanned workstations and resolve issue in no time.

**Browsers compatible for accessing remote desktop**

- InternetExplorer (version 5.5 and above)
- Firefox

**Accessing Remote Control**

1. Click the Asset tab in the header pane.
2. From the Resources block, select Workstations under IT assets. The list of all the workstations is displayed.
3. Select the workstation you wish to gain remote access.
4. From the workstation details page, click on Remote Control tab.

| Note | Please note that the credentials should be configured before selecting the remote control tab. If the credentials are not configured then the log-in credentials window pops up. |
5. Click **Save and Remote Control**. The connection is established between the server and the remote machine.

The Remote Control can be accessed in Agent mode. So if you are launching Remote Control for the first time on an Agentless mode, you need to install the agent. To push the agent to remote machine from Active Directory click here.

### Installing the Agent and starting the Service

Once the agent is installed, the remote workstation can be accessed. The ports to install and start the agent as service in WMI are TCP 135, 445 and one random port greater than 1024. The ports used in agent based scanning is TCP 9000. The service starts with the name ManageEngine AssetExplorer-RemoteControl.

**Note**

You can verify the installation of the agent by check the files under the directory 
C:\ProgramFiles\ManageEngine\AssetExplorer\ of the remote machine.

### Installing ActiveX Viewer in the browser

On starting the service in the remote machine, the ActiveX viewer is installed in the client machine, which connects the remote machines as add on to the browser. In Firefox 2 browser, the viewer is installed each time the remote control button is selected.

### Meeting

The Meeting is established between the remote machine and the client machine (this may or may be server machine) from which you try to connect the remote machine. The port TCP/ 10443 should be opened in the firewall between the remote machine and the client machine for this communication.

### Disconnect Remote Control

When you close the pop up window of Remote Control, the service running in the target computer will be stopped using WMI.
Setting Up AssetExplorer

Setting Up ManageEngine AssetExplorer helps the user to add the General Settings, Asset Management and Organization details. Under general settings you can configure, mail settings, notification rules and back up scheduling. Under asset management you have product, product type, vendor, software type, software category, resource state and IT services. And under organization details you can configure the complete organization details.

- Asset Management
- Organization Details
- General Settings
Asset Management

Asset Management helps you to configure all asset related tasks such as Product Type, Product, Vendor, Workstation - Additional fields, Asset - Additional fields, Import from csv, Resource State and IT Services.

- Product Type
- Product
- Vendor
- Workstation Additional Fields
- Asset Additional Fields
- Import from CSV
- Resource State
- IT Services
Configuring Product Types

Each product can be categorized into a specific Product Type. Product Types are the parent category under which you can group the products. Say, Adobe Photoshop and Macromedia Flash can be categorized under the product type Software, while HP Inkjet Printer can be categorized under the product type Printer.

- **Product Type**: Product Type is the high level categorization in grouping products. Say, Workstations in an organization are grouped under the product type “Workstations”.
- **Type**: Type is a subdivision of product types that is classified into Asset, Components and Consumable. Say, Workstation is an Asset, Keyboard is a Component and the Printer Toner is Consumable.
- **Category**: Category is a common attribute of Product Types and Types. They are classified into IT and Non-IT. Say, Workstation is an IT asset, and Projector and Scanners are Non-IT assets. Example: Adobe Photoshop & HP Inkjet Printer can be categorized as,

<table>
<thead>
<tr>
<th>Assets</th>
<th>Product Type</th>
<th>Type</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adobe Photoshop/Macromedia Licenses</td>
<td>Software Licenses</td>
<td>Components</td>
<td>IT</td>
</tr>
<tr>
<td>HP Inkjet Printer</td>
<td>Printer</td>
<td>Asset</td>
<td>IT</td>
</tr>
</tbody>
</table>

To access the product type configuration page,

1. Click the Admin tab in the header pane.
2. Click Product Type icon under the Asset Management block. The list of available product types are displayed. From this page, you can add, edit and delete product types.

**Add Product Type**

1. Click Add New Product Type link.
2. In the Add Product Type form, specify the Product Type Name which will uniquely identify the individual product types. Say, Printer.
3. Select the Type from the drop down. Say, Asset, Component, Consumable.
4. Select the Category from the drop down. Say, IT, Non-IT.
5. Specify any relevant information about the product type in the Description field.
6. Click Save button. Click Save and add new button to save and add another Product type.

**Edit Product Type**

1. Click the Edit icon beside the Product Type to be edited. This opens the Edit Product Type page.
2. Modify the details and Save the changes.

**Delete Product Type**

1. Click the Delete icon beside the Product Type to be deleted. A dialog box pops up asking your confirmation on the delete operation.
2. Click Ok to proceed. You can see the product type deleted from the list.
Configuring Products

Commodities purchased by your organization is termed as Products. You can either import all the product details into the application using Import from CSV option or you can add the product details manually and associate to vendors. Say, Dell Latitude - D600 is a product representing Dell Laptops.

To access the product configuration page,
1. Click the Admin tab in the header pane.
2. Click Products icon under Asset Management block. The product list view page opens. From this page you can add, edit and delete a product.

Add New Product

1. Click Add New Product link.
2. Choose the Product Type under which you would like to classify the product from the drop down. Say, you have selected the Product Type as Workstation, which can be either a desktop or a laptop.
3. Specify the Product Name which will uniquely identify the individual products. Say, Dell Latitude D600. The Product Type and Product Name are mandatory fields.
4. Specify the Manufacturer of the product. Say, Dell.
5. Specify the Part No of the product.
6. If required, add relevant Comments for the product.
7. Click Save button to save the Product and continue with the vendor association. Click Save and Add New to save the product and add another product. You can associate any number of vendors to the product.

Associating Vendors to Product

1. Click Vendors tab.
2. Choose the Vendor supplying the product from the drop down. The Product Name is in non-editable text.
3. Enter the Price of the product. The Vendor and Price of the product are mandatory fields.
4. Specify the Tax Rate (%) of the product.
5. Specify the Warranty Period by selecting the number of years and months from the drop down.
6. Choose the Maintenance Vendor.
7. If you wish to add any comments, add it to the Comments text box.
8. Save the changes.

Edit Product

1. Click the Edit icon beside the Product Name you wish to modify the details.
2. In the Edit Product form, you can edit all the fields mentioned in the add product procedure.
3. Save the changes.
Delete Product

A product can be deleted only if it is not being referenced elsewhere. To delete a product,

1. Click the Delete icon beside the product to be deleted. A confirmation dialog box appears confirming the delete operation.
2. Click Ok to proceed. The product is deleted from the list.
Configuring Vendors

Organizations deal with various vendors for buying resources. Hence it is essential to maintain the vendor information along with the products supplied in the database.

To access the vendor configuration page,

1. Click Admin tab in the header pane.
2. Click Vendor icon under Asset Management block. The vendor list view page opens, from where you can add, edit, delete and associate products to the vendor.

Add Vendor

1. Click Add New Vendor link.
2. In the Add Vendor page, specify the Vendor Name. Say, Dell. This field is mandatory.
3. If required, specify relevant information about the product in the Description field.
4. Enter the name of the Contact Person from the vendor location.
5. Specify the Address of the vendor.
6. Specify the Contact Info, such as E-mail ID, Phone, Fax and Web URL.
7. Click Save. The Products tab appears where you can add and associate the products supplied by the vendor. Click Save and Add New to add another vendor.

Associate Products supplied by Vendors

1. Click the Products tab -> Associate Product button.
2. Select the Product Name from the drop down and specify the Price of the product. Both are mandatory fields.
3. Specify the Tax Rate (%) of the product.
4. Specify the Warranty Period by selecting the number of years and months from the drop down.
5. Choose the Maintenance Vendor from the drop down.
6. If you wish to add any comments, add it to the Comments text box.
7. Save the changes. Repeat the steps to add all the products supplied by this vendor.

Edit Vendor

1. From the Vendor List View page, click Edit icon beside the vendor.
2. Modify the details and Save the changes.

Delete Vendor

1. From the Vendor List View page, click Delete icon beside the vendor to be deleted. A confirmation dialog appears.
2. Click Ok to proceed. The vendor details is removed from the list.
Adding Workstation Additional Fields

You can define your own organization specific fields that need to appear in the Add New Workstation form apart from the default fields. You can add **text** fields, **numeric** fields, and **date/time** type fields in the form.

**To Add Workstation Additional Fields,**

1. Click the Admin tab in the header pane. This opens the configuration wizard page.

2. Under the Asset Management block, click the Workstation Additional Fields icon. This opens the Workstation Additional Fields page.

**Configuring Additional Text fields**

1. You can configure 12 additional text fields for Add New Workstation form. By default the list of all additional text fields are displayed. Specify the **Label** for the workstation additional fields.
2. Specify any relevant information about the additional fields in the **Description** field.
3. Specify the **Type** of the text field by enabling the radio button. It can be either **Single-Line**, **Multi – Line** or **Pick list (drop down menu list).**
4. Specify the **Default Values** in the given text field.
5. Click **Save** to save the settings.

**Configuring Additional Numeric fields**

1. Click the Numeric tab. You can configure 4 additional numeric fields for an workstation.
2. Specify the **Label** for the additional field. This is a mandatory field.
3. Specify any relevant information for the additional fields in the **Description** field.
4. Click **Save** to save the settings.

**Configuring Additional Date/Time fields**

1. Click Date/Time tab. You can configure 4 additional fields for an workstation.
2. Specify the **Label** for the additional field. This is mandatory field.
3. Specify any relevant information for the additional fields in the **Description** field.
4. Click **Save** to save the settings.
Adding Asset Additional Fields

You can define your own organization specific fields that need to appear in the New Asset form apart from the default fields. You can add **text** fields, **numeric** fields, and **date/time** type fields in the form.

**To Add Asset Additional Fields,**

1. Click the Admin tab in the header pane. This opens the configuration wizard page.

2. Under the Asset Management block, click the Asset Additional Fields icon. This opens the Asset Additional Fields page.

**Configuring Additional Text fields**

1. You can configure 12 additional text fields for Add New Asset form. By default the list of all additional text fields are displayed. Specify the **Label** for the asset additional fields.
2. Specify any relevant information about the additional fields in the **Description** field.
3. Specify the **Type** of the text field by enabling the radio button. It can be either **Single-Line**, **Multi – Line** or **Pick list (drop down menu list).**
4. Specify the **Default Values** in the given text field.
5. Click **Save** to save the settings.

**Configuring Additional Numeric fields**

1. Click the Numeric tab. You can configure 4 additional numeric fields for an asset.
2. Specify the **Label** for the additional field. This is a mandatory field.
3. Specify any relevant information for the additional fields in the **Description** field.
4. Click **Save** to save the settings.

**Configuring Additional Date/Time fields**

1. Click Date/Time tab. You can configure 4 additional fields for an asset.
2. Specify the **Label** for the additional field. This is mandatory field.
3. Specify any relevant information for the additional fields in the **Description** field.
4. Click **Save** to save the settings.
Import Assets from CSV (Comma Separated Value) Files

You have an option to import all resource data from csv file to AssetExplorer.

To import data from CSV file,

1. Login to the AssetExplorer application using username and password.
2. Click the Admin tab in the header pane. This opens the configurations wizard page.
3. Under the Asset Management block, click the Import from CSV file icon. This opens the Resource Import Wizard page.

   **Step 1: Specify the Resource Category & Type**
   
   1. Select the Resource Category to be imported, from the combo box. Ex IT or Non-IT.
   2. Select the Resource Type from the combo box. Say Components, Other IT Assets, Workstations and so on.

   **Step 2: Locate the CSV file**
   
   1. Click the Browse button in the wizard.
   2. Select the CSV file in the file chooser window and click Open.
   3. Click Step 2 button.

   **Step 3: Customize Mapping**
   
   1. The CSV column names are populated in the select boxes beside each label. Map the AssetExplorer requester fields with the field names from the CSV file.
   2. Click Step 3 button.

   **Step 4: Import**
   
   1. Click Import Now button. The values from the CSV file will be imported to the requester details. Once the import is complete, you get the data on number of records were added, records overwritten, and resource failed on import will be displayed.
   2. If at any point you wish to stop importing from the CSV file, click the Close button.
Adding Resource State

Resource can be categorized based on its current status in the organization. Ex: Resource In Use, In Store, Expired and so on.

To Add New Resource State,

1. Click the Admin tab in the header pane. This opens the Configuration Wizard page.

2. Under the Asset Management block click the Resource State icon. This opens the Resource State list page.

3. Click the New Resource State link on the right hand side of the page. This opens the Resource State Details page. By default you have five resource state available in AssetExplorer. You cannot edit or delete the resource state.

4. Specify the Resource State name in the given text field. This is a mandatory field.

5. Specify any relevant information about the resource state in the Description field.

6. Click Add Resource State button to add the resource to the application.
Adding IT Services

You can add all the IT services available (you provide) in your organization using this option. These IT services are used for asset tracking in asset explorer.

To add New IT Services,

1. Click the Admin tab in the header pane. This opens the Configuration Wizard page.

2. Under the Asset Management block, click the IT Services icon. This opens the IT Services list view page.

3. Click the Add New Service link on the right hand side of the page. This opens the Add IT Services page.

4. Specify the IT Service name in the given text field. This is a mandatory field.

5. Specify any relevant information about the IT Service in the Description field.

6. Click Save button to add the IT Service to AssetExplorer. If you like to save and add another IT service then click Save and Add New button. If you do not want to proceed further then click Cancel.
Softwares

Softwares helps you to configure all the software related tasks such as Software Type, Software Category, Software License Types and Additional fields for software license and license agreement.

- Software Type
- Software Category
- License Additional Fields
- Software License Types
- Agreement Additional Fields
- Import License (s) from CSV
Configuring Software Type

All different forms of software such as, licensed, prohibited, freeware, shareware, excluded and unidentified software comes under this category.

To access the Software Type configuration page,

1. Click the Admin tab in the header pane. This opens the Configuration Wizard page.

2. Click the Software Type icon under the Software block. This opens the Software Type list view page. By default there are six software types that cannot be edited nor deleted.
   - **Shareware:** Software that is available free of charge, may be distributed for evaluation with a fee requested for additional features or a manual etc.
   - **Freeware:** Software that is provided without charge.
   - **Prohibited:** Software that is prevented from use.
   - **Excluded:** Software that is omitted from use.
   - **Managed:** All licensed software comes under this software type.
   - **Un-Identified:** Unknown softwares can be categorized under this software type.

Adding New Software Type

1. Click the New Software Type link. This opens the Software Type Details page.
2. Specify the Software Type name in the given text field. This is a mandatory field which will uniquely identify individual software type.
3. Specify any relevant information about the Software Type in the description field.
4. Click Add Software Type button. This adds the software type to ServiceDesk Plus and gets displayed below the add software form.

Editing Software Type

1. From the Software Type list view page, click the Edit icon beside the software type to edit.
2. Modify the necessary changes.
3. Click Update Software Type button.

Deleting Software Type

1. From the Software Type list view page, click the Delete icon beside the software type to delete.
2. A confirmation dialog appears.
3. Click Ok to proceed. The software type is deleted from the list.
Adding Software Category

Different groups of software such as, software used for Accounting, Internet, Graphics, Multimedia, Operating System and so on are added to AssetExplorer using this option.

To Add New Software Category,

1. Login in to AssetExplorer application using your user name and password.
2. Click the Admin tab in the header pane. This opens the configuration wizard page.
3. Under the Asset Management block, click the Software Category icon. This opens the Software Category list page. By default you have nine software categories displayed in AssetExplorer.
4. Click New Software Category link on the right hand side of the page. This opens the Software Category Details page.
5. Specify the Software Category name in the give text field. This is a mandatory field.
6. Specify any relevant information about the category in the Description field.
7. Click Add Software Category button to add the software category to AssetExplorer. The added software category gets displayed below the form.
License - Additional Fields

If you require any further additional information while adding the software license details, apart from the pre-set fields in the Add software licences form you can configure them under License - Additional Fields. You can add text fields, numeric fields, date type fields and Cost fields as the additional fields in the form.

To add license - additional fields,
1. Click the Admin tab in the header pane to open the configuration wizard page.
2. Click License-Additional Fields icon under Softwares block. The License Additional page opens to view the following tabs namely, Text, Numeric, Date/Time and Cost. You can add up to twelve text and cost fields, and four numeric and date/time fields.

Configuring Additional Text fields
1. By default, the Text tab is selected. Specify the Label for the Additional field.
2. Specify any relevant information about the additional field in the Description text field.
3. Select the Type of the text field by enabling the radio button. It can be either Single-Line, Multi-Line or Pick List (drop down list).
4. You can also specify default values to be pre-filled in the software license form.
5. Save the settings.

Configuring Additional Numeric fields
1. Click the Numeric tab.
2. Specify the Label for the additional field.
3. Specify any relevant information about the additional fields in the Description text field.
4. Save the settings.

Configuring Additional Date/Time fields
1. Click the Date/Time tab.
2. Specify the Label for the additional field.
3. Specify any relevant information about the additional fields in the Description text fields.
4. Click Save to save the settings.

Configuring Cost fields
1. Click the Cost tab.
2. Specify the Label for the Additional field.
3. Specify any relevant information about the additional field in the Description text field.
4. You have two cost type fields, **Add cost** (for cost addition) and **Subtract cost** (for cost subtraction). Click the corresponding radio button to select the cost fields and also specify the **Default values** to be pre-filled in the software license form.

These additional fields will appear while adding a software license under the **Additional Informations** block. To delete a user-defined fields, instead of adding the label names, delete the existing label names you wish to remove from the fields of the form and click **Save**. The fields are automatically removed from the Software License form.
Software License Types

Every software manufacturing company has their unique software license type apart from the several common license types. Since it is not feasible to support all these license types, AssetExplorer helps you customize the license types for all software manufacturers based on the workstations and users.

To access the configuration,

1. Click the Admin tab in the header pane to open the configuration wizard page.
2. Click Software License Types under Softwares block. The list of default license types filtered by the manufacturer is displayed.
   - Individual: License type for single installation.
   - OEM (Original Equipment Manufacturers): License type for softwares that are already installed in the hardware.
   - Named User License: License Type for a specific user.
   - Volume: License Type supporting multiple users.
   - Client Access License (CAL): License type that gives a user the rights to access the services of the server.
   - Trial License: License Type for trial versions of a software.
   - Enterprise (Perpetual): License Type that does not require renewal and is for life long.
   - Concurrent License: License Type for a software that can be accessed by a specific number of users at a time.
   - Free License: License Type for freeware softwares.
   - Enterprise Subscription: License Type that requires renewal for every specific period.
   - Node Locked: License Type for workstations with specific configurations.

Adding New License Type

1. Click Add New License Type.
2. Enter the License Type as per the manufacturer say, Enterprise, Standard and so on. This field is mandatory.
3. Select the Manufacturer of the software from the drop down. If required, you can also add a new manufacturer using the Add icon.
4. The License type can be based on the workstations or users.
   - Workstations: The license is allocated to the workstation.
   - User: The license is allocated to the workstation as well as the user.
   Select the corresponding option from Track By drop down.
5. Choose any one option from Installation allowed drop down.
   - Single: Similar to Individual license, only one installation is allowed for this license type.
   - Volume: Multiple installation (s) is allowed for this license type.
   - Unlimited: Unlimited installation (s) is allowed for this license type.
   - OEM (Original Equipment Manufacturers): The software license is attached to the hardware i.e. hardwares say, laptops for which the software is installed. The software cannot be transferred to another workstation and the license expires once the workstation is moved to Disposed state.
6. If you have selected Workstation, the Is Node Locked option appears. This option can be enabled for workstation with specific configurations. Enabling this option automatically changes the Installation Allowed field to Single.

7. If you have selected Users, the Users Allowed field appears. From this field you can select the number of users who can access the software, say, Single, Volume (multiple) or Unlimited.

8. If the software is a one time installation and does not require a renewal, enabled Is Perpetual check box.

9. If the software is freeware with unlimited installations and no expiry date, enable Is Free License check box.

10. Few software license type can be divided into sub license types say for instance, with Client Access License (CAL) you can purchase license for every user who access the server (Per User) or license for every device that accesses the server (Per Device). Enter the License Option and click Add to add it in the pick list field. You also have an option to delete the License Option from the pick list field.

**Editing License Type**

1. From the Software - License Types page, click on the Edit icon beside the License Type you wish to edit.

2. The Software - License Types page opens with the values populated while adding the License Type.

3. Modify the details and Save the changes.

**Deleting License Type**

1. From the Software - License Types page, select the Manufacturer from the Filter drop down.

2. Select the check box beside the license type to be deleted.

3. Click Delete button. A confirmation dialog appears.

4. Click Ok to continue. The Software - License Type is deleted from the selected manufacturer list.
License Agreement- Additional Fields

If you require any further additional information while adding the software license agreement details, apart from the pre-set fields in the licence agreement form you can configure them under License Agreement - Additional Fields. You can add text fields, numeric fields, date type fields and Cost fields as the additional fields in the form.

To add license - additional fields,

1. Click on the Admin tab in the header pane to open the configuration wizard page.
2. Click on Agreement - Additional Fields icon under Softwares block. The License Agreement Additional page opens to view the following tabs namely, Text, Numeric, Date/Time and Cost. You can add up to twelve text and cost fields, and four numeric and date/time fields.

Configuring Additional Text fields

1. By default, the Text tab is selected. Specify the Label for the Additional field.
2. Specify any relevant information about the additional field in the Description text field.
3. Select the Type of the text field by enabling the radio button. It can be either Single-Line, Multi-Line or Pick List (drop down list).
4. You can also specify default values to be pre-filled in the license agreement form.
5. Save the settings.

Configuring Additional Numeric fields

1. Click on the Numeric tab.
2. Specify the Label for the additional field.
3. Specify any relevant information about the additional fields in the Description text field.
4. Save the settings.

Configuring Additional Date/Time fields

1. Click on the Date/Time tab.
2. Specify the Label for the additional field.
3. Specify any relevant information about the additional fields in the Description text field.
4. Click Save to save the settings.

Configuring Cost fields

1. Click on the Cost tab.
2. Specify the Label for the Additional field.
3. Specify any relevant information about the additional field in the Description text field.
4. You have two cost type fields, Add cost (for cost addition) and Subtract cost (for cost subtraction). Click the corresponding radio button to select the cost fields and also specify the Default values to be pre-filled in the license agreement form.
These additional fields will appear while adding the license agreement details. To delete a user-defined fields, instead of adding the label names, delete the existing label names you wish to remove from the fields of the form and click **Save**. The fields are automatically removed from the License Agreement form.
Importing Software Licenses from CSV

Adding license information for each and every software scanned in AssetExplorer application is tedious and endless. Hence with the easy-to-use CSV import option, you can import software license information from your existing database or even from other applications. The License Key is a pivotal identifier to add or update the software license(s). So the license key should be unique to avoid overwriting with the existing ones.

To import contacts from CSV file,

1. Click the Admin tab in the header pane to open the configurations wizard page.
2. Click Import License from CSV icon under the Software block.

Step 1: Locate CSV file

1. Click Browse button to select the CSV file.
2. On locating the CSV file from the file chooser window, click Open. The path to the file appears automatically in Locate CSV file field.
3. Click Submit.

Step 2: Customize Mapping

1. Map the application software license fields with the field names from the CSV file. If there are any additional fields configured under License - Additional Fields, the same appears in the customized mapping form.
2. Click **Import** button. The software license details from the CSV file is imported.

3. Once the import is complete, the data on the total number of license, the number of license imported and the number of failed to import license is displayed.

<table>
<thead>
<tr>
<th>Imported Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Licenses</td>
</tr>
<tr>
<td>Imported Licenses</td>
</tr>
<tr>
<td>Failed Licenses</td>
</tr>
</tbody>
</table>

**Warning**

If there are any failure records while importing software license(s), don’t re-import the same CSV file. Instead download the FailedLicensesList.csv from the Imported Result page and correct the errors on comparing with ErrorList.txt file. The Error List file shows the failed software license records along with the corresponding error message. This is to avoid duplication of the software license(s).
Organization Details

Organization details helps you to configure the complete organization details such as, Company Details, Regions, Sites, Departments, Users, Technicians, Technician - Additional fields, Roles and Active Directory.

- Company Details
- Regions
- Sites
- Departments
- Users
- Technicians
- Technician - Additional Fields
- Roles
- Active Directory
Adding Company details

To provide complete information about your organization, add your company details in the ManageEngine AssetExplorer.

Adding Company Details

1. Click on Admin tab -> Click Company Details icon in the Configuration Wizard page. This opens the Organization Details page.
2. Specify the full name of the organization in the given Name field. This will be used as a header while generating purchase orders.
3. Provide relevant information about the organization in the Description field.
4. Specify the Address, City, Postal Code, State and Country of the organization.
5. Specify the general contact E-mail ID of the organization.
6. Specify the Phone No, Fax No, and Web URL of the organization.
7. You can also import the Company Logo(s) and use any one of them wherever necessary.

Importing Image

- Click Import Image button beside the Company Logo field.
- Click the Browse button and choose the image file from the file chooser window and click Open.
- Click Import.
8. Save the settings.
Configuring Regions

Organizations with branches across the globe in different geographic locations can configure the locations of their branch under Regions. To access the configuration,

1. Click the Admin tab in the header pane to open the configuration list view page.
2. Click Regions icon under Organizational Details block. The region list view page opens from where you can add, edit and delete a region.

Adding Region

1. Click Add New Region link.
2. Specify the Region Name where you have your branch operations set up. This field is mandatory.
3. Specify relevant information about the operations in the above-mentioned region in the Description field.
4. Save the details. The newly added region is listed in the Region list view page. Click Save and add new button to save the region and add another region. Clicking on Cancel takes you back to the list view.

Editing Region

1. Click the Edit icon beside the region to edit. Alternatively, you can also click on the Region name.
2. Edit the details and save the changes.

Delete Region

1. Click the Delete icon beside the region name.
2. A confirmation message appears. Click Ok to proceed. The region name is deleted from the list.
Adding Sites

You can add list of all sites (building or complex) of your organization in the ManageEngine AssetExplorer.

Add New Site

1. Click the Admin tab -> Click Sites icon in the Configuration Wizard page. This opens Sites View list page.
2. To add the new site of your organization, click on Add New Site link on the right side corner of the page.
3. Specify the Site Name where you have your organization operations set up. This is a mandatory field.
4. Specify relevant information about the operations in the above-mentioned site in the Description field.
5. Select the Region of the site from the combo box.
6. Click the Save button to save the details. You can see the newly added site getting listed in the Site View list page.
7. Click Save and add new button to save the Site and add another Site.

Editing & Deleting Sites

To Edit Site,

1. From the Site view list page, click on Edit icon or click on the Site name to edit the site details. This brings up the Edit Site page.
2. Edit the details and save the changes.

To Delete Site,

1. From the Site view list page, click on Delete icon to delete the Site name from the list.
2. A pop up window pops up to get your confirmation on the delete operation. Click yes to proceed. You can see the Site name deleted from the list.
Configuring Departments

The various departments available in an organization (even across the branches) can be configured in AssetExplorer. The department details are essential while adding the users and technicians since they are associated to a department in an organization.

To access the department configurations,

1. Click the Admin tab in the header pane to open the configuration wizard page.

2. Click the Departments icon under Organization details block. The Department list view page opens. From this page, you can add, edit and delete departments.

Add New Department

1. Click Add New Department link.
2. Specify the new Department Name in the given field. Say, Engineering. This field is mandatory.
3. Select the Site of the department from the drop down.
4. Specify any relevant information about the department operations in the Description field.
5. Save the details. The newly added department is listed in the list view page. Clicking on Cancel takes you to the list view page.

Editing Department

1. Click the Edit icon beside the department name to edit. Alternatively, you can also click on the Department name to edit the department details.
2. Edit the details and Save the changes.

Deleting Department

1. Enable the check box beside the department you wish to delete.
2. Click Delete button. A confirmation message appears.
3. Click Ok to proceed. The selected department name is deleted from the list.
Adding New User

1. Click **Admin** tab -> Click **Users** icon 🌐 in the Configuration Wizard page. This opens Users list view page.
2. From the user view list page, click **Add New User** link on the right side corner of the Users view list page.
3. Specify the **User Name** in the given field. ex. John. This is a mandatory field.
4. Specify the **Employee ID** and specify any relevant information about the user in the **Description** field.
5. Specify the **E-mail**, **Phone**, **Mobile** details of the user to notify users in case of any changes.
6. Select the **Department Name** from the combo box.
7. Specify the **Job title** of the user.
8. Click **Save** to save the settings.
9. Click **Save and add new** button to save the user and add another requester.

Editing & Deleting User

**To Edit User,**

1. From the user view list page, click on the user Name to bring up the Edit User page.
2. Edit the details of the user and save the changes.

**To Delete User,**

1. From the user view list page, select the users to be deleted by enabling the check box.
2. Click **Delete** button to delete the users. You can see the users deleted from the User view list.
Configuring Roles

ManageEngine AssetExplorer can be accessed by various technicians in your organization. Those who access the application will have a defined set of roles and tasks to execute. You to configure the roles and assign access permissions for each and every user of the application.

**Note**

By default you have SDAdmin role. You cannot edit or delete this role.

SDAdmin Role have all the administrative privileges. The technician with SDAdmin role have full control and access permission to all the modules of the AssetExplorer except for PO approval process. If needed PO approval permissions can be provided.

To add roles,

1. Log in to the AssetExplorer application using your user name and password.
2. Click the Admin tab in the header pane. This opens the Configuration Wizard page.
3. Under the Organization Details block, click the Role icon. The next page displays the available list of roles. You can add, edit, or delete roles.
4. Click the Add New Role link available at the top right corner of the Role List page. This opens the Add Roles form.
5. In the Add Role form, enter the Role Name. This field cannot be empty and should to be unique.
6. Set the access permissions for the role. To set the access permission, just select the check boxes beside the access levels defined for each of the modules in the application. **For Example:** if you would like to provide add permissions for the workstation and solution modules and only view permissions for the rest, select the check box below Add against the Workstation and Solutions modules. For the remaining modules, select the check box below View. Selecting the Add check box automatically enables view permissions option.
7. Specify the Description for the role to be added.
8. Click Save.

If you want to add more than one role, then instead of clicking Save, click Save and add new button. This adds the new role and reopens the add role form after displaying a message for the addition of the role.

At any point, if you decide not to add the new role, then click Cancel to get back to the role list. Clicking the View List link on the top right corner of the add role form will also take you to the role list view.

**Edit Role**

1. From the Role List page, click the edit icon beside the role name to be edited. This opens the Edit Role form.
2. Modify the details and Save the changes. At any point, if you wish to cancel the operation, click Cancel.

While editing a role, if you wish to add a new role, click the Save and add new button instead of clicking Save button after making the changes. The Add Role form opens after displaying a message that the changes are saved.
Delete Role

1. In the **Role List** page, click the delete icon beside the role name to be deleted. A confirmation dialog is opened.
2. Click **OK** to proceed. If you do not want to delete the role, then click **Cancel**.
Adding Technicians

1. Click Admin tab -> Click Technicians icon in the Configuration Wizard page. This opens Technicians list view page.
2. Click Add New Technician link on the right side corner of the Technicians list view page.
3. Specify the Technician Name in the given field. ex. Administrator. This is a mandatory field.
4. Specify the Employee ID in the given field.
5. Specify the E-mail address, Phone, Mobile and SMS Mail ID Ex. 1234567890@mobile.att.net.
6. Select the Department Name of the technician from the combo box.
7. Specify the technician Job Title.
8. Specify the unique Login Name and Password for a technician. Specify the password again in the Re-Type Password for confirmation. All are mandatory fields.
9. If you would like to provide the technician with the Purchase Order Approver role then select the corresponding check box.
10. To assign roles to the technician select the Available Roles from the list and move it to the Assigned Roles list.
11. You can associate and restrict sites to the technician. On associating the sites with the technician, only the assets available for the site can be viewed by the technician.
   Select the sites from the Available list and move it to Associated Sites list using the >> button.
12. Save the changes. You can see the technician listed in the list view.
13. Click Save and add new button to save the technician details and add another technician.

Editing & Deleting Technician

To Edit Technician

1. From the Technician list view page, click Edit icon or click on the technician name. This brings up the Edit Technician.
2. Edit the technician details and save the changes.

To Delete Technician

1. From the technician list view page, click the Delete icon. A pop up window pops up asking your confirmation on the delete operation.
2. Click OK to proceed. You can see the Technician name deleted from the list.
Configuring Active Directory Authentication

On enabling Active Directory Authentication, the requester login name and password with its domain will be validated in the Active Directory. Once the login name and password is authenticated in the AD, you can login to AssetExplorer application using your system user name and password on selecting the corresponding domain name.

Thus enabling AD authentication provides you with an advantage of not having to remember too many passwords, say password for logging in to your system and one for logging in to AssetExplorer application and so on.

**Note**
Please ensure that before you start configuring the AD Authentication, you have already imported the requesters. Only if a user account is available in AssetExplorer application, it will authenticate the password for that user account in the active directory. Hence, when none of the users have been imported from the active directory, the authentication cannot be done for the user account.

To configure the Active Directory Authentication,

1. Log in to the **AssetExplorer** application using the **user name** and **password**.
2. Click the **Admin** tab in the header pane. This opens the Configuration Wizard page.
3. Under the **Organization details** block, click the **Active Directory** icon. This opens the **Active Directory** page.
4. Enable or disable active directory authentication. By default the **AD authentication** will be disabled. If you have already imported requesters from the any of the domains in your network, then click **Enable** button.

Even after enabling Active Directory (AD) Authentication, if you would like to bypass the AD Authentication, then in the application login screen, you need to select **Local Authentication** from the Domain list box after entering the login name and password, and then click **Login** button to enter AssetExplorer.

If you have not yet imported requesters from any of the domains, you can import them by clicking **Import Requesters from Active Directory** link. The **Import From Active Directory** window pops up.

1. From the list of domains that are listed in the **Domain Name** combo box, select the domain name in which the active directory from which you wish to import is installed. If the other details such as domain controller name, user name, and password have already been entered in the Domain scan page, then that will be populated automatically. Else enter the name of the domain controller in the **Domain Controller Name** field, login name and password in the corresponding fields.
2. You also have an option to select the fields to import from the active directory. The unselected fields will not be imported. This is to avoid over ridding of the new values by the old values from the directory.
3. Click **Import Now !**. The import wizard displays the various **Organizational Units** (OUs) available in that domain. Choose the specific OU from which you wish to import users by selecting the check box beside it.
4. Click **Start Importing**. Once the import is complete, the data on how many records were added, how many overwritten, and how many failed to import will be displayed.
Schedule AD import

1. You have an option to schedule Active Directory import in specified number of days.
2. Select the **Schedule AD import** check box. Specify the number of days in the text box. The requester details gets imported automatically once in specified number of days.
3. Click **Save Schedule** button to be in sync with the active directory.
LDAP authentication

Apart from Active Directory Authentication, you can also import users from the LDAP server through the domain controller. On enabling the LDAP authentication, the users can login using their LDAP credentials. By default, the LDAP authentication is disabled.

| Note | 1. The users should be imported from the domain before configuring LDAP authentication.  
  2. The LDAP authentication supports both linux and windows users.  
  3. On enabling LDAP authentication for windows users, the AD authentication gets disabled automatically. |

To access the configuration,

1. Click the Admin tab in the header pane to open the configuration wizard page.
2. Click the LDAP Authentication icon . By default, the LDAP authentication is disabled.

Add and Import Users from a Domain

1. Click Add New Domain button under Domain Controllers block.
2. Specify the Domain Controller from where the users have to be imported in the Domain Controller text field. For ex: ldap://<server name>:<port number>. The default port is 389.
3. Enter the User Name along with the Organizational unit (OU) in the given field. Say, CN:john, CN=Users, DC=domain name, DC=com.
4. Specify the Password in the respective field.
5. Specify the Base DN which represents the distinguished base name such as, CN = Users, DC = domain name, DC = com.
6. Specify the criteria which you want to apply on that particular domain controller in the Search Filter text field. Say, mail=* will import users from the parameter mail in the specified domain controller.
7. Select the LDAP Server Type from the combo box. Say, OpenLDAP.

| Note | If you have chosen the Server type as default LDAP such as, Microsoft Active Directory, Novell eDirectory and OpenLDAP then the Login Attributes Label, Mail Attribute Label and Distinguished Name Attributed Label will appear in a non editable text. |

8. If the LDAP Server Type is Others then, specify the Login Attribute Label and Mail Attribute Label in the respective fields.
9. The Distinguished Name Attributed Label is similar to the Base DN.
10. Click Save to save the domain controller. If you want to save and import the users, click Save and Import.

You can also import users from the existing domain by clicking Import Now of the corresponding Domain Controllers. The existing data will be over written on importing the users from the same domain. Once the users are imported, Enable LDAP Authentication by selecting the check box. Click Save. The user can login to the application using his LDAP credentials.
Edit Domain Controller

1. Click domain controller name which you wish to edit. This opens the Add new domain controller form.
2. Modify the changes and click Save. To save and import the users from the domain controller, click Save and Import.

Delete Domain Controller

1. From the domain controller list view page, enable the check box adjacent to the domain controller which you wish to delete.
2. Click Delete button. A pop up window confirming the delete operation appears. Click Ok to continue. The domain controller gets deleted from the list.

On deleting a domain controller, the users imported from that domain controller will not be able to login to the application using LDAP credentials.
General
Under the General block, you can configure all your general tasks such as, configuring the Mail Server Settings, enabling Notification Rules, scheduling a backup and general settings.

- Mail Server Settings Configure mail server settings to send mails from AE application to the outside world.
- Notification Rules Notify events to technicians for effective management of assets.
- Backup Scheduling Take back-up of all your files at regular intervals using this option.
- General Settings Configure Invalid Service Tags, provide option for MAC address identification during a scan, and for OIDs with unknown type; option to specify the product type and product name.
Mail Server Settings

You need to set the mail server settings in the ManageEngine AssetExplorer to send notification mails and mail alerts to users and technicians.

To Configure outgoing Mail Server Settings

1. Click Admin tab in the header pane. This opens the Configuration Wizard page.

2. Under the General tab, click the Mail Server Settings icon. This opens the Helpdesk Mail Server settings page.

3. Specify the Server Name or IP Address for the outgoing mail server. Ex. SMTP.

4. If you have a back up server specify the Server Name or IP Address in the Alternate Server Name or IP Address field.

5. Specify the Sender’s Name in the given field, which will be displayed along with the email ID.

6. Specify the email address to which the replies need to be sent in the Reply-to-Address.

7. Specify the type of the email dispatching Ex. SMTP or POP etc. in the Email Type field.

8. Specify the Port where the mails need to be sent.

Of the above fields, Server Name / IP Address, Reply-to Address, and Port are mandatory fields and hence cannot take null values.

If your outgoing mail server needs authentication, then select the check box Requires Authentication. And enter the User Name and Password for authenticating the outgoing mails.

Click Save to save the settings.
Notification Rules

Notification Rules are helpful when an event has to be notified to the technicians. Say to, 1) Notify technicians when purchase order is overdue (OR) Notify administrator about audit changes during discovery (OR) Notify technician regarding software under compliance during discovery (OR) Prohibited software is identified during discovery also when the lease period for the asset expires a notification will be sent.

When the above-mentioned situations are managed suitably, it not only helps technicians in efficient management of the assets but also bring in cost savings to the organization.

**Note:** By default you have notification rules enabled for **Purchase Order Overdue**.

Enabling Notification Rules

1. Click the **Admin** tab in the header pane. This opens the Configuration Wizard page.

2. Under the General block, click the Notification Rules icon. This opens Notification Rules page.

3. To set the notification rules select the relevant notification rules by enabling the check box. Notification rules are self-explanatory.

4. Except for Purchase order Overdue, you can assign technicians for all other notification rules to notify the fault. This is a mandatory field.
   1. To assign technician select **Choose** button, this brings up the **Choose Technician Name** page.
   2. Select as many as technicians from the list using ctrl or shift keys.
   3. Click **OK** button to save. You can see the selected technicians displayed in the choose technicians grayed out field.

5. Click **Save** button to save the set notification rules. The notification to the administrator or to the technicians will be generally sent through email.

6. If you would like to be notified of the lease expiry date prior to the current expiry date, then specify the number of days before which you need to be notified in the given numeric field.
Back-up Scheduling

You can take back-up of all the files on a regular interval automatically by configuring back-up scheduling.

To Configure Back-Up Scheduling,

1. Log in to AssetExplorer application using your user name and password.
2. Click the Admin tab in the header pane. This opens the Backup Scheduling page.

3. Under the General block, click the Backup Scheduling icon . This opens the Backup Scheduling page.
4. Click the Edit Scheduling link on the right hand side of the page. This opens the Edit Settings page.
5. By default Back-up Schedule would be enabled. Click Disable option to stop the back-up scheduling.
6. To specify the time interval between each back-up schedule, select the number of days from the Every combo box. Once in every specified days the back will be taken automatically.
7. Select the first Start backup on date and time from the calendar button and combo box. This is a mandatory field. This will start the scheduling on the specified date automatically hence it cannot take null values.
8. Specify the notify email address in case of any backup failure in the given text field. This is a mandatory field.
9. Select either or both Database and File Attachment option to take the Back-up. This is a mandatory field.
10. Specify the Backup location in the given text field to store the backup data.
11. Save the changes.
General Settings

In General Settings, you can configure Invalid Service Tags, provide option for MAC address identification during scan, and for OIDs with unknown type; option to specify the product type and product name.

Configure Invalid Service Tags

While performing a scan, the Workstations and Servers are uniquely identified based on its Service Tags, Name and MAC address. So when the service tags are incorrectly configured by the OEM, many machines would result in similar service tags. In such cases, if a scan is performed, one workstation details would be overwritten by the other. To avoid this, you can add the service tag under Invalid Service Tag list such that, the workstations with the service tag is ignored during a scan.

Enable/Disable MAC address identification during scan

Machines connected through VPN or VMware have similar MAC address. So while performing a scan in similar network environment, one machine is overwritten by the other. Hence you can uniquely identify the MAC address by enabling/disabling the radio button.

OIDs with Unknown Type

While performing a scan, the routers, switches, printers and access point in the network generate an OID which uniquely denotes the assets. If the OID of the asset is not available in the database, a new entry is populated from where you can choose the product type and specify the product name.
Asset Management

Assets can be categorized in to IT Assets, Non IT Assets & Asset Components. This includes Workstations, Printers, Routers, Software Licenses, Scanners, Projectors and even your air conditioning systems. These assets require substantial investment and proper maintenance to cut down the unnecessary cost incurred by unmanaged assets.

AssetExplorer helps you to track & manage your assets efficiently. It tracks all your newly added assets, and have a record of all the assets in the organization.

- IT Assets
- IT Components
- Non -IT Assets
IT Assets

All IP based assets are discovered under IT assets. The list of possible IT assets are given below,

- Workstations
- Laptops
- Printers
- Switches
- Servers
- Routers
- Access Points

- Adding IT Asset
- Adding Bulk of Assets to Group
- Assigning Bulk of Assets to Department/Site
- Modifying Bulk Assets State
- Change log-in Credentials for Bulk of Assets
- Bulk Scan of Assets
- Viewing Asset Details
- Copy Resource
- Attach Asset
- Attach Component
- Attach Documents
- Assigning User/Department/Asset
- Adding New Workstation
- Scanning Bulk of Newly Added Workstation
- Changing Workstation As Server
- Viewing Workstation Details
- Copy Workstation
- Print Preview of Workstation Details
- Modify Device Type
- Adding Software to Workstation
- Importing Workstation Details from CSV
Adding IT Asset

IT Assets other than workstations and servers are configured under IT Assets.

To add new asset,

1. Log in to AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the Assets home page.
3. Click Create New link and select Asset option from the list. [OR] Click IT Assets under Assets on the left side of the page Select the respective IT assets link. e.g. Access points, Printers and so on. This opens the particular IT asset page.

Specifying Asset Details

4. Click New button. This opens the Add Asset page.
5. Specify the Product Name, Asset Name in the given text field. They are mandatory field.
6. Specify the Asset Tag, Asset Serial No, Bar Code, Vendor Name, Asset Cost in $ in the corresponding text fields.
7. Specify the Acquisition Date, Expiry Date & Warranty Expiry Date from the calendar button.
8. Select the Site from the combo box.
9. Specify the Location in the given text field.

Specifying Asset State

10. Specify the Asset State by selecting the current status of the asset from the combo box. If the asset is in Use state you need to associate or assign asset to department or user or asset.
11. Allocate the asset to an Asset or to an User/ or to the Department by selecting any of the two radio button. Say Associate to Asset or Assign User/or Department.
12. If you choose to associate asset to an asset then select the asset name from the Choose Asset combo box. Or if you have chosen to assign user or the department then select User or Department from the combo box.
13. If the asset is leased select the check box Asset is Leased. If the asset is leased then specify the From and To date of the calendar button.
14. Click Save button to save the changes. To save and add another asset click Save and add new button.

Editing Assets

1. From the Asset list view page, click the Asset name. This opens the Asset details page.
2. Click Edit Resource button. This opens the Edit Asset page.
3. Modify the asset details and Save the changes.

Deleting Assets

1. From the assets list view page, select assets to be deleted by enabling the check box. You can select multiple assets to be deleted.
2. Click Delete button to delete the selected assets. You can see the selected assets deleted from the list.
Adding Bulk of IT Assets to Group

You have two types of groups in AssetExplorer say, Static group and Dynamic. Add to group option in asset list view page is to group bulk of assets. These assets will be grouped under the Static group by default.

To Add IT Assets to group,

1. Log in to AssetExplorer application using your user name and password.
2. Click any of the IT Assets link under the Assets block on the left hand side of the page. This opens the assets list view page.
3. Select the assets to be added to the group by enabling the check box. This opens the Add Resource(s) to page.
4. By default you can group assets only to the static group. Either to the Existing static group or New static group can be added.
5. If you would like to group the assets under existing static group then click the corresponding radio button. Select the group name from the combo box.
6. Else, if you would like to add a new static group and group the assets, click New Group radio button. Specify the Group Name and relevant information about the group in the Description field.
7. Click Save button to save the changes.
Assigning Bulk of IT Assets to Department/Site

Assigning IT Asset to Department

1. Log in to AssetExplorer application using your user name and password.
2. Click the **Assets** tab in the header pane. This opens the assets home page.
3. Select the **IT Assets** title under the **Assets** block. Select the corresponding IT Asset link say, servers, workstations and so on. This opens the selected **Assets list** view page.
4. Click **Asset Name** to be assigned to a **Department/Site** by enabling the check box.
5. From the workstation list view page, click the **Actions** menu -> select **Assign to Department** option from the list. This opens **Assign Resource(s) to Department** pop-up window.
6. Select the **Department Name** from the combo box and **Save** the details.

Assigning IT Asset to Site

1. From the workstations list view page, click the **Actions** menu -> select **Assign to Site** option from the list. This opens **Assign Resource(s) to Site** pop-up window.
2. Select the **Site name** from the combo box.
3. **Save** the details. Else click **Cancel** button.
Modifying Bulk of IT Assets State

To modify the state of IT Assets,

1. Log in to AssetExplorer application using your user name and password.
2. Click the **Assets** tab in the header pane. This opens the assets home page.
3. Select the **IT Assets** title under the **Assets** block. Select the specific IT Asset link. This opens the Assets list view page.
4. Select the assets to be modified of their status by enabling the check box. Click the **Actions** menu and select the **Modify State** option. This opens the **Modify State** pop up window.
5. Select the **State** from the combo box.
6. Save the changes.
Change log-in Credentials for bulk of IT Assets

You can change the log-in credentials for bulk of assets. You have **Global** credentials and **Local** credentials. Global credentials are common login permissions for all the assets. Local credentials are private login permissions for an asset (generally used to restrict the access permissions to everyone).

**To change the login credentials,**

1. Log in to the AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Click **IT Assets** under Assets block on the left hand side of the page. Select the respective IT assets link. e.g. Access points, Printers and so on. This opens the corresponding IT asset page.
4. Select the IT Assets to change the log-in credentials. This opens the assets list view page. Click the Actions combo box --> and select the **Change Credentials** option. This opens the corresponding page.
5. Select either Global Credentials or Local Credentials by selecting the radio button.

**Global Credentials**

1. On selecting the global credentials, select the **Mode** from the combo box. Ex: Domain mode or Network mode.
2. If you select **Domain mode**,
   1. Select the **Domain name** from the combo box.
   2. Specify the **User Name** and **Password** for the domain.
3. If you select the **Network mode**,
   1. Select the Network from the combo box.
   2. Specify the protocol for connecting to the linux system. Say SSH or Telnet
   3. If you would like to **Scan Software in Linux Workstations** then enable the corresponding check box.
   4. Specify the **User Name** and **Password** for the network.
4. Save the details. If you would like to Save and scan now click the corresponding option.

**Local Credentials**

1. On selecting the local credentials, specify the User Name and Password.
2. To connect it to the Linux workstations, select the protocol by enabling either of the two radio buttons. Say SSH or Telnet.
3. If you would like to **Scan Software in Linux Workstations** then enable the corresponding check box.
4. Save the details. If you would like to Save and Scan now click the corresponding option.
**Bulk Scan of IT Assets**

Scan now option is to scan group or bulk of assets for assets data. Each time when a new asset is added, instead of scanning all the assets, you can scan the newly added assets for resource details.

If you have changed the credentials for the assets or if you want to specify the log-in credentials for an asset then select the **Change Credentials** option under the actions menu and specify the details. Then click **Save and Scan now** button for scanning the assets.

**To scan bulk of IT Assets,**

1. Log in to AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Select the **IT Assets** title under the **Assets** block. Select the specific IT Asset link. This opens the Assets list view page.
4. Select the assets to be scanned by enabling the check box. Click the Actions tab -> select **Scan Now** option. This opens the Scan wizard page with total number of scanned and failed assets. And you can view the asset details in the Resource details page.
Viewing IT Asset Details

1. Log in to AssetExplorer application using your user name and password.
2. Click on the Assets tab in the header pane. This opens IT Assets list view page.
3. Click on the IT Asset name. By default Resource Details gets displayed.

Viewing Resource Info Details

Resource Info tab displays the resource details such as, Resource Name, Product Name, State, Resource Tag, Resource Serial No, Bar Code, Vendor, Part No, Cost, Acquisition Date, Expiry Date, Warranty Expiry and many other details are displayed.

Viewing Relationships

This relationship tab shows the IT Assets association to other Assets, Business Services, Users and Components.
On clicking the tab -> click the Add Relationship button on the top right hand side of the page.

Connection Relationship

1. Click the Connection Relationship option from the list. This opens the Connection Relationship page.
2. To connect the assets to other assets select the Assets radio button.
   1. Select the Product to be associated from the Choose Product combo box.
   2. Select the assets to be connected from the Asset List.
   3. Move the selected asset to the Connected Assets list using the >> button.
   4. Save the details. You can see the connected assets under the Connected to Assets block.
3. To connect the assets to the Business Services select the corresponding radio button.
   1. Select the business services from the list to be connected to the assets such as, Email, Internet Access and so on.
   2. Move the selected assets from the Business Service list to the Connected Services list using the >> button.
   3. Save the changes. You can see the connected business services under the Business Services block.

Usage Relationship

1. Click the Usage Relationship option from the list. This opens the Usage Relationship page.
2. Select the Assign the asset to User/Department radio button to associate the asset to the user/department.
   1. Select the User from the combo box.
   2. Select the Department to be associated from the combo box.
   3. If the Asset is Leased then select the corresponding check box.
   4. Save the changes. (Or)
3. Select the Associate to Asset radio button to assign the asset to the asset.
   1. Choose Asset to be associated from the combo box.
   2. Save the details.
Container Relationship

1. Click the Container Relationship option from the list. This opens the Container Relationship page.
2. Select the **Components** radio button to associate the components to the user. Select the type of components to be displayed in the list by selecting it from the choose product combo box.
3. Select the components from the **Components List** and move it to the **Attached components list** using >> button.
4. Save the details.

Viewing History of IT Asset

Click on the **History tab** to view the IT Asset history. This gives the complete IT - Assets **Resource Ownership History on date and State of the components**.

Viewing Contracts of the IT Asset

Click on Contracts tab to view the contracts attached to the IT Asset. This gives the complete details about the contract such as, vendor name, support details, contract rules, expiry date, cost and other rules.

Viewing Costs

1. Click on the Costs tab to view the costs associated to the IT Asset.
2. Click on **Add Cost** button to add cost to the IT Asset.
3. Select the Cost Factor from the combo box. For ex. **Service Cost**. This is a mandatory field.
4. Specify the description about the cost in the **Description** field. Say if the cost factor is service cost you can specify important information about the service cost.
5. Specify the amount in $ in the **Amount** field. This is a mandatory field.
6. Select the **Date** from the calendar button.
7. Click on **Add Cost** button to add the cost. You can see the cost added to the IT Asset shown in the Other Costs list view page.
Copy Resource

Using Copy Resource option you can make multiple copies of the resource and its details. On making multiple copies of the resource, it becomes easier for the technician to add bulk of similar assets. The technician need not manually enter all the resource details for each resource. The new copies of the resource will be assigned with new asset name and rest of the details is retained as is.

To Copy Resource,

1. Log in to the AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Click IT Assets under Assets block on the left hand side of the page. Select the respective IT assets link. e.g. Access points, Printers and so on. This opens the corresponding IT asset page.
4. Click the Title of the assets to be duplicated. This opens the Asset details page.
5. Click the Actions menu on the right hand side of the page. Select Copy Resource option. This opens the Copy Resource pop up window.
6. Specify the Number of Copies in the given numeric field. The maximum value you can enter is 9. If you need more than 9 copies of the asset, then you need to invoke Copy Resource again.
7. Click Copy to make the copies of the asset. The new copies of the asset will be assigned with new asset name that will uniquely identify them. The rest of the information is retained as is. While copying a resource, the owner name will not be available for the copied resource. If needed you can also edit the resource details.
Attach Asset

To attach assets to asset,

1. Log in to AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane, this opens the assets home page -> select the IT Assets link on the left hand side of the page.
3. From the IT Assets list view page -> click the title of the IT asset to be attached with an asset. This opens the asset details page.
4. Click the Actions combo box -> select the Attach Asset option from the list. This opens the Attach Asset pop up window.
5. If you would like to display the list of all assets or filter specific asset then select the assets to be displayed from the List combo box. Ex: Printer, Access Points and so on. Also select the type of asset such as asset in store, in use and so on from the of type combo box.
6. You have two columns, such as Asset list and Attached Assets list. You have to select the assets to be attached from the assets list and move it to the attached assets list using the >> button. To remove the assets from the attached assets list use the << button.
   **Example:**
   If you would like to attach a printer to a workstation then select the list of assets to be attached from the assets list and move it to the attached assets list.
7. Save the changes. If you would like to detach all the attached assets then select the Detach All option.
Attach Component

To attach components to an asset,

1. Log in to AssetExplorer application using your user name and password.
2. Click the **Assets** tab in the header pane, this opens the assets home page -> select the **IT Assets** link on the left hand side of the page.
3. From the IT Assets list view page -> click the title of the asset to be attached with an component. This opens the asset details page.
4. Click the **Actions** combo box -> select the **Attach Component** option from the list. This opens the **Attach Component** pop up window.
5. If you would like to display the list of all components or filter specific components then select the components to be displayed from the **List** combo box. Ex: keyboard, mouse and so on. Also select the type of component such as component in store, in use and so on from the **of type** combo box.
6. You have two columns, such as **Component list** and **Attached Components** list. You have to select the components to be attached from the components list and move it to the attached components list using the **>>** button. To remove the component from the attached component list use the **<<** button.
   **Example:**
   If you would like to attach a keyboard and a mouse to a workstation then select the list of components to be attached from the component list and move it to the attached component list.
7. **Save** the changes. If you would like to detach all the attached components then select the **Detach All** option.
Attach Document

To attach document to an asset,

1. Log in to AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane, this opens the assets home page -> select the IT Assets link on the left hand side of the page.
3. From the IT Assets list view page -> click the title of the asset to be attached with an document. This opens the asset details page.
4. Click the Actions combo box -> select the Attach Documents option from the list. This opens the Attach File pop up.
5. Click the Browse button to select a file.
6. On selecting the file, click Attach button to attach the document.
   Note: You can attach any number of files up to 3 MB.
Assigning IT Asset to User/Department/Asset

1. Log in to AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Select the **IT Assets** title under the **Assets** block. Select the specific IT Asset link. This opens the selected Assets list view page.
4. Click on the Asset Name to be assigned a user/department/asset. This opens the Asset details page.
5. Click the **Actions** menu on the right hand side of the page -> click **Assign** option from the list. This opens the Assign/Associate page.
6. If you would like to assign the asset to user or department then, select **Assign User and or Department** radio button. Or if you would like to associate with an asset then select **Associate to Asset** radio button.

**Assign User and or Department**

1. On selecting this radio button, select the **User name and Department name** from the combo box.
2. If the asset is leased then enable the **Asset is Leased** check box and specify the **From** and **To** date of the lease.

**Associate to Asset**

1. On selecting this radio button, **Choose the Asset** to be associated from the combo box.
7. **Save** the details.
Adding New Workstation

1. Log in to AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Click Create New on the top left side of the page. Select the Workstation option from the list. [OR] Click the Workstations link under the Assets block on the left hand side of the page. This opens the Workstation Configuration page.

Computer Details

4. Specify the Name of the computer in the name text field and select the Model of the workstation from the combo box. This is a mandatory field. Ex: Latitude D620.
5. Specify the Service Tag & Manufacturer of the workstation in the given text field.
6. Specify the Processor Count, Processor Info, Clock Speed and Manufacturer of the processor in the given text fields.
7. Specify the RAM and Virtual Memory in (MB) the given text fields.
8. Also specify the Name and Service Pack of the operating system in the corresponding fields.

Resource Info Details

9. Specify the resource info details such as, Resource Tag, Resource Serial No, Bar Code & Location in the given text fields.
10. Select the Site and Vendor Name of the workstation from the combo box.
11. Select the Acquisition Date, Expiry Date & Warranty Expiry Date from the calender button.

Asset State Details

12. Select the status of the asset from the Asset State combo box. Ex: In Store, In Use and so on

Network Adapter Details

13. Specify the network adapter details such as, Network IP Address, MAC Address, NIC, Network, DNS Server name & Default Gateway in the given text field.
14. Select the Domain name from the combo box.
15. If you would like to enable DHCP then select the check box.

Input/Output Devices Details

16. Also specify the input/output devices details of the workstation. Specify the Monitor Type, Mouse Type, Keyboard Type & their corresponding manufacturers in the respective fields.
17. Save the details. If you would like to Save and Add New workstation then click the corresponding button.
Editing Workstations

1. From the Workstation list view page. Click the Workstation name to edited. This opens the workstation details page.
2. Click the Edit button on the top right side of the page. This opens the Edit Workstation page.
3. Modify the details and Save the changes.

Deleting Workstations

1. From the workstation list view page, select workstations to be deleted by enabling the check box. You can select multiple workstations to be deleted.
2. Click Delete button to delete the selected workstations. A pop up window pops up asking your confirmation on the delete operation.
3. Click OK to proceed. You can see the selected workstations deleted from the list.
Scanning Bulk of Newly Added Workstation

Using this option you can scan a new workstation added to the domain for its hardware and software details. This is very useful when you have to scan a single or a set of newly added workstations. In such case you don’t have to scan the entire domain for adding the workstations to the network.

To Scan New Workstation,

1. Click the **Assets** tab in the header pane -> click the **Workstations** link under the **Assets** tab on the left side of the page. This opens Workstations list view page.
2. Select the **Workstations** to be scanned by enabling the check box -> Click the **New Scan** button next to the **Actions** menu. This opens the Scan Configuration page.
3. Specify the **Name/IP** of the workstation. This is a mandatory field.
4. Select the log-in credentials for the workstation by selecting either of the two radio buttons. Say **Global** or **Local** credentials. By default Global Credentials option will be selected. For more information on global and local credentials refer Workstation Device Scan under Scanning IT Assets.

**Global Credentials**

1. Select the **Scan type** from the combo box. Say **Domain mode** or **Network mode**.
2. Select the **Domain/Network** name from the combo box. This is a mandatory field.
3. Specify the **Login Name** and **Password** for the selected domain.

**Local Credentials**

1. Specify the local **Login Name** and **Password**.
2. Select the **Protocol** to connect it to the workstation by enabling either of the two radio buttons. Say SSH or Telnet.
3. If you would like to scan software in Linux workstation then select the corresponding check box.
4. Click **Scan** to scan the workstation. Else click **Cancel**.
Changing Workstation As Server

You can change workstation as server,

1. Log in to the AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Click IT Assets under Assets block on the left hand side of the page. Click the Workstations link. This opens the workstations list view page.
4. Select the workstations name to be changed as server by enabling the check box.
5. Click the Actions menu and select the Change as Server option. This opens the Modify Device Type page as shown below.
6. Select the Type of the server from the combo box.
7. Save the details.
Viewing Workstation Details

1. Log in to AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Click Workstations link under Assets block. This opens the workstations list view page.
4. Click on the workstation name to view the workstations details. By default Resource Info tab details are displayed.

Resource Info Details

Resource Info tab displays Resource Name, Product Name, Service Tag, Operating System, Last Logged in User details, State, Resource Tag, Resource Serial No, Bar Code, Vendor, Part No, Processor, Domain, Cost in $, Acquisition Date, Expiry Date and Warranty Expiry Date of the workstation are displayed.

Viewing Hardware Details

1. Click Hardware tab to view the Hardware details of the workstation.
2. The hardware tab displays complete hardware details such as Computer System details, Operating System details, Processor details, Memory details, Installed memory modules, Network details, Discs and Drive details Printer details and Other details.

Viewing Software Details

1. Click Software tab to view the software details of the workstation. This opens the software details page with the list of all installed software’s in the workstation. By default the list of All Software will be displayed.
2. Select the corresponding filter option from the Filter Viewing combo box. There are different status levels of the software, such as Excluded, Managed, Prohibited and Unidentified. You can select any of these status levels and filter the software’s listed.
3. Click on the software name to view the software details, number of licensed installations, number of unlicensed installations and number of Purchased licenses. If there are any license violations a warning message is displayed saying: License Violation. Software installations are more than purchased licenses.
4. You also get the details about the Installed Service Packs in the workstation

Viewing Relationships

This relationship tab shows the IT Assets association to other Assets, Business Services, Users and Components.

On clicking the tab -> click the Add Relationship button on the top right hand side of the page.

Connection Relationship

1. Click the Connection Relationship option from the list. This opens the Connection Relationship page.
2. To connect the assets to other assets select the Assets radio button.
   1. Select the Product to be associated from the Choose Product combo box.
   2. Select the assets to be connected from the Asset List.
   3. Move the selected asset to the Connected Assets list using the >> button.
   4. Save the details. You can see the connected assets under the Connected to Assets block.
3. To connect the assets to the **Business Services** select the corresponding radio button.
   1. Select the business services from the list to be connected to the assets such as, Email, Internet Access and so on.
   2. Move the selected assets from the **Business Service** list to the **Connected Services** list using the >> button.
   3. **Save** the changes. You can see the connected business services under the **Business Services block**.

**Usage Relationship**

1. Click the Usage Relationship option from the list. This opens the Usage Relationship page.
2. Select the **Assign the asset to User/Department** radio button to associate the asset to the user/department.
   1. Select the **User** from the combo box.
   2. Select the **Department** to be associated from the combo box.
   3. If the **Asset is Leased** then select the corresponding check box.
   4. **Save** the changes. (Or)
3. Select the **Associate to Asset** radio button to assign the asset to the asset.
   1. Choose **Asset** to be associated from the combo box.
   2. **Save** the details.

**Container Relationship**

1. Click the Container Relationship option from the list. This opens the Container Relationship page.
2. Select the **Components** radio button to associate the components to the user. Select the type of components to be displayed in the list by selecting it from the choose product combo box.
3. Select the components from the **Components List** and move it to the **Attached components list** using >> button.
4. **Save** the details.

**Viewing History of workstation**

Click on the History tab to view the history of the workstation. This gives the complete **Workstation Scan History** on date and **Resource Ownership History**.

**Viewing Contracts of the workstation**

Click on Contracts tab to view the contracts attached to the workstation. This gives the complete details about the contract such as, Vendor name, Support details, Contract rules, Expiry date, Cost and other rules.

**Viewing Costs**

1. Click on the **Costs** tab to view the costs associated to the workstation.
2. Click on **Add Cost** button to add cost to the workstation.
3. Select the Cost Factor from the combo box. For ex. Service Cost. This is a mandatory field.
4. Specify the description about the cost in the Description field. Say if the cost factor is service cost you can specify important information about the service cost.

5. Specify the Amount in $ in the Amount field. This is a mandatory field.

6. Select the Date from the calendar button.

7. Click on Add Cost button to add the cost. You can see the cost added to the workstation shown in the Other Costs list view page.
Copy Workstation

Using Copy Workstation option you can make multiple copies of the workstation and its details. On making multiple copies of the workstation, it becomes easier for the technician to add bulk of similar workstation. The technician need not manually enter all the workstation details for each workstation. The new copies of the workstation will be assigned with new workstation name and rest of the details is retained as is.

To Copy Workstation,

1. Log in to the AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Click IT Assets under Assets block on the left hand side of the page. Select the Workstations link. This opens the workstation details page.
4. Click the Workstation Name to be duplicated. This opens the Workstation details page.
5. Click the Actions menu on the right hand side of the page. Select Copy Workstation option. This opens the Copy Workstation pop up window.
6. Specify the Number of Copies in the given numeric field. The maximum value you can enter is 9. If you need more than 9 copies of the workstation, then you need to invoke Copy Workstation again.
7. Click Copy to make the copies of the workstation. The new copies of the workstation will be assigned with new workstation name that will uniquely identify them. The rest of the information is retained as is. While copying a workstation, the owner name will not be available for the copied workstation. If needed you can also edit the workstation details.
Print Preview of Workstation Details

You can view the preview of the workstation details in printable format.

To view the Preview of Workstation Details,

1. Log in to the AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Click IT Assets under Assets block on the left hand side of the page. Select the Workstations link. This opens the workstation details page.
4. Click the Workstation Name to view the preview of the workstation details. This opens the Workstation details page.
5. Click the Actions menu on the right hand side of the page. Select Print Preview option. This opens the Resource Details pop up window. You can view the complete resource details, workstation details, network details, disks & drives details, printer details, other details, software details, installed service packs details, resources attached details, workstations scan history details, resource ownership history details, contracts details & costs details.
Modify Type

To Modify Device type,

1. Log in to the AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Click IT Assets under Assets block on the left hand side of the page. Select the Workstations link. This opens the workstation list view page.
4. Click the Workstation Name to be modified of the device type. This opens the Workstation details page.
5. Click the Actions menu on the right hand side of the page. Select Modify Type option. This opens the modify device type pop up window.
6. Select the device type from the Modify Type combo box.
7. Save the details.
Adding Software

Using this option you can add multiple software to the workstation.

To Add Software to the workstation,

1. Log in to the AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Click IT Assets under Assets block on the left hand side of the page. Select the Workstations link. This opens the workstation list view page.
4. Click the Workstation Name. This opens the Workstation details page.
5. Click the Actions menu on the right hand side of the page. Select Add Software option. This opens the Add Software pop up window.
6. Select the software from the list to be added to the workstation. You can select multiple software to be added to the workstation using ctrl or shift keys.
7. Save the details. Else Close the pop-up window.
Importing Workstation Details from CSV

You can import your workstation details saved in CSV (Comma Separated values) format. If you have asset details in .XLS files, open it with Microsoft Excel and save it as .CSV files and then import it.

1. From the Assets list view page click the **Import from CSV** link on the top right hand side of the page. This opens the **Resource Import Wizard** page.
2. Select the Resource Category such as IT from the combo box. This is a mandatory field.
3. Select the Resource Type such as Components or IT- Assets (Workstation & Other IT Assets) from the combo box. This is a mandatory field.
4. Locate the .CSV file using the Browse button.
5. Click on Step2 button to go to the next page. Click Previous button if you need to go the previous page.
6. Specify the workstation Details. The columns in .CSV file are populated in the select boxes beside each field label. Advent Net Manage Engine Asset Explorer asset field’s needs mapping with the field names from the .CSV file.
7. Select the Workstation Name from the combo box. This is a mandatory field.
8. **Note:** Use FQD Names (Fully Qualified Domain Name) for workstations. While scanning Asset Explorer can identify only the FQD Names else the existing workstation will be added as a new workstation (duplicate copy).
9. Workstation Name will be the identifier for workstations. i.e. no two workstation can have the same name if so it will be replaced by the new name.
10. Select the Service Tag, Model, Manufacturer, Operating System, Location, and Assigned to User and Assigned to Department from the combo box.
11. Click **Step3** to go the next page. Click Previous button if you need to go the previous page.
12. Click **Import Now** button to import the existing data from the .CSV file. Once the data is imported, you can see the Import Wizard page with result break-up.
Components

A part of the asset (ie. associated with the asset) which does not stand alone are grouped under components. The list of all possible components are given below,

- Keyboards
- Mouse
- Software’s
- Software Licenses
- Printer ink

- Adding New Component
- Viewing Component Details
- Copy Resource
- Attaching Document
- Associate Asset
- Adding Components to Group
Adding New Component

1. Log in to AssetExplorer application using your user name and password.
2. Click Assets tab in the header pane. This opens the assets home page.
3. Click Create New link and select Asset option from the list. [OR] Click Asset Components under Assets block on the left side of the page. Select the respective asset component link. e.g. Keyboards. This opens the specific asset component page.
4. Click the New button. This opens the Add Asset page.
5. Specify the Product Name in the given text field. This is a mandatory field. If needed you can also add new product by clicking the Add New link.
6. Specify the Asset Name in the given text field. This is a mandatory field.
7. Specify the Asset Tag, Asset Serial No, Bar Code, Asset Cost in $ in the corresponding text fields.
8. Specify the Acquisition Date, Expiry Date & Warranty Expiry Date from the calendar button.
9. Specify the Location and select the Site from the combo box.
10. Click Save button to save the changes. To save and add another asset click Save and add new button.

Editing Component

1. From the components list view page, click the components name. This opens the components details page.
2. Click Edit Resource button on the right hand side of the page. [OR] click the Actions tab -> select Edit Resource option. This opens the Edit Resource page.
3. Modify the component details and Save the changes.

Deleting Component

1. From the components list view page, select components to be deleted by enabling the check box. You can select multiple components to be deleted.
2. Click Delete button. You can see the selected components deleted from the list.
Viewing Component Details

1. Log in to AssetExplorer application using your user name and password.
2. Click Assets tab in the header pane. This opens IT Assets list view page.
3. Click the IT Asset name. By default Resource Details gets displayed.

Viewing Resource Info Details

Resource Info tab displays the resource details such as, Resource Name, Product Name, State, Resource Tag, Resource Serial No, Bar Code, Vendor, Part No, Cost, Acquisition Date, Expiry Date, Warranty Expiry, Date many other details are displayed.

Viewing History of Components

Click History tab to view the Component history. This gives the complete Components Resource Ownership History on date and State of the components.

Viewing Contracts of the Components

Click Contracts tab to view the contracts attached to the Components. This gives the complete details about the contract such as, vendor name, support details, contract rules, expiry date, cost and other rules.

Viewing Costs

1. Click Costs tab to view the costs associated to the IT Asset.
2. Click Add Cost button to add cost to the IT Asset.
3. Select the Cost Factor from the combo box. For ex. Service Cost. This is a mandatory field.
4. Specify the description about the cost in the Description field. Say if the cost factor is service cost you can specify important information about the service cost.
5. Specify the amount in $ in the Amount field. This is a mandatory field.
6. Select the Date from the calendar button.
7. Click Add Cost button to add the cost. You can see the cost added to the IT Asset shown in the Other Costs list view page.
Copy Resource

Using Copy Resource option you can make multiple copies of the component and its details. On making multiple copies of the resource, it becomes easier for the technician to add bulk of similar components. The technician need not manually enter all the components details for each component. The new copies of the component will be assigned with new component name and rest of the details is retailed as is.

To Copy Resource,

1. Log in to the AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Click Components under Assets block on the left hand side of the page. Select the respective Assets Components link. e.g. Keyboards. This opens the corresponding components page.
4. Click the Title of the components to be duplicated. This opens the Components details page.
5. Click the Actions menu on the right hand side of the page. Select Copy Resource option. This opens the Copy Resource pop up window.
6. Specify the Number of Copies in the given numeric field. The maximum value you can enter is 9. If you need more than 9 copies of the component, then you need to invoke Copy Resource again.
7. Click Copy to make the copies of the component. The new copies of the component will be assigned with new component name that will uniquely identify them. The rest of the information is retained as is. While copying a component, the owner name will not be available for the copied component. If needed you can also edit the component details.
Attaching Document

To attach document to an component,

1. Log in to AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane, this opens the assets home page -> select the Assets Components link under Assets block on the left hand side of the page.
3. From the Assets Components list view page -> click the title of the component to be attached with an document. This opens the component details page.
4. Click the Actions combo box -> select the Attach Documents option from the list. This opens the Attach File pop up.
5. Click the Browse button to select a file.
6. On selecting the file, click Attach File button to attach the document.
   Note: You can attach any number of files up to 10 MB.
Associate Asset

To associate asset to an component,

1. Log in to AssetExplorer application using your user name and password.
2. Click the **Assets** tab in the header pane, this opens the assets home page -> select the **Assets Components link** under **Assets** block on the left hand side of the page. This opens the Components list view page.
3. Click the title of the component to be associated with an asset. This opens the component details page.
4. Click the **Actions** combo box on the top right of the page -> select the **Associate** option from the list. This opens the **Associate to Asset** pop up window.
5. Select the Asset to be associated from the **Choose Asset** combo box.
6. Save the details. Component associated to an asset can be viewed under the relationships tab of the selected asset details page.
Adding Components to Group

You have two types of groups in AssetExplorer say, **Static** group and **Dynamic**. Add to group option in component list view page is to group bulk of components. These components will be grouped under the Static group by default.

To Add Components to group,

1. Log in to AssetExplorer application using your user name and password.
2. Click any of the **Components** link under the **Assets** block on the left hand side of the page. This opens the components list view page.
3. Select the components to be added to the group by enabling the check box. This opens the **Add Resource(s) to** page.
4. By default you can group components only to the static group. Either to the **Existing static group** or **New static** group can be added.
5. If you would like to group the components under **existing static group** then click the corresponding radio button. Select the **group name** from the combo box.
6. Else, if you would like to add a new static group and group the components, click **New Group** radio button. Specify the **Group Name** and relevant information about the group in the **Description** field.
7. Click **Save** button to save the changes.
Non-IT Assets

All non IP based assets are grouped under Non - IT assets. The list of all possible non-it assets are given below,

- Projectors
- Scanners
- Tables
- Chairs
- Telephones

- Adding Non - IT Asset
- Adding Non - IT Asset to Group
- Adding Non - IT Asset to Department/Site
- Modifying Bulk of Non-IT Assets State
- Viewing Non-IT Asset Details
- Copy Resources
- Attach Asset
- Attach Component
- Attach Document
- Assigning Non-IT Assets to User/Department
Adding Non-IT Asset

To Add Non-IT Asset,

1. Log in to AssetExplorer application using your username and password.
2. Click the Assets tab in the header pane. This opens the Assets list view page.
3. Click Create New link and select the Asset option from the list. [OR]
   Click Non - IT Assets under Assets block on the left side of the page. Select any one the Non - IT assets link to be added. e.g. Projectors & Scanners etc. This opens the Non - IT asset page.

Specifying Asset Details

4. Click New button. This opens the Add Asset page.
5. Specify the Product Name, Asset Name in the given text field. They are mandatory field.
6. Specify the Asset Tag, Asset Serial No, Bar Code, Vendor Name, Asset Cost in $ in the corresponding text fields.
7. Specify the Acquisition Date, Expiry Date & Warranty Expiry Date from the calendar button.
8. Select the Site from the combo box.
9. Specify the Location in the given text field.

Specifying Asset State

10. Select the Asset State by selecting the current status of the asset from the combo box. If the asset is in Use state you need to associate or assign asset to department or user or asset.
11. Allocate the asset to an Asset or to an User/ or to the Department by selecting any of the two radio button. Say Associate to Asset or Assign User/or Department.
12. If you choose to associate asset to an asset then select the asset name from the Choose Asset combo box. Or if you have chosen to assign user or the department then select User or Department from the combo box.
13. If the asset is leased select the check box Asset is Leased. If the asset is leased then specify the From and To date of the calendar button.
14. Click Save button to save the changes. To save and add another asset click Save and add new button.

Editing Non-IT Assets

1. From the Non-IT Assets list view page -> click the title of the asset to be edited. This opens the asset details page.
2. Click Edit Resource button on the top right hand side of the page (Or) click the Actions combo box and select Edit Resource option. This opens the Edit Asset page.
3. Modify the details and Update the changes.

Deleting Non-IT Assets

1. From the Non-IT Assets list view page, select the assets to be deleted by enabling the check box.
2. Click Delete button to delete the selected assets. A pop-up window pops up asking your confirmation on the delete operation.
3. Click OK to proceed. You can see the selected assets deleted from the list.
Adding Non-IT Assets to Group

You have two types of groups in AssetExplorer say, Static group and Dynamic. Add to group option in Non-IT asset list view page is to group bulk of Non-IT assets. These assets will be grouped under the Static group by default.

To Add Non-IT Assets to group,

1. Log in to AssetExplorer application using your user name and password.
2. Click any of the Non-IT Assets link under the Assets block on the left hand side of the page. This opens the Non-IT assets list view page.
3. Select the Non-IT assets to be added to the group by enabling the check box. This opens the Add Resource(s) to page.
4. By default you can group Non-IT assets only to the static group. Either to the Existing static group or New static group can be added.
5. If you would like to group the Non-IT assets under existing static group then click the corresponding radio button. Select the group name from the combo box.
6. Else, if you would like to add a new static group and group the Non-IT assets, click New Group radio button. Specify the Group Name and relevant information about the group in the Description field.
7. Click Save button to save the changes.
Assigning Bulk of Non-IT Assets to Department/Site

1. Log in to AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Select the Non-IT Assets title under the Assets block. Select the specific Non-IT Asset link. This opens the Assets list view page.

Assign Bulk of Assets to Department

1. Click on the Non-IT assets to be assigned to a Department by enabling the check boxes. Click Actions menu and select Assign to Department option. This opens Assign Resources to pop-up window.
2. Select the Department Name from the combo box.
3. Save the details.

Assign Bulk of Assets to Site

1. Click on the Non-IT assets to be assigned to a Site by enabling the check boxes. Click Actions menu and select Assign to Site option. This opens Assign Resources to pop-up window.
2. Select the Site Name from the combo box.
3. Save the details.
Modify Bulk of Non-IT Asset State

To modify bulk of Non-IT Asset State,

1. Log in to AssetExplorer application using your user name and password.
2. Click the **Assets** tab in the header pane. This opens the assets home page.
3. Select the **Non-IT Assets** under **Assets** block on the left and side of the page. Select the specific non-IT Asset link. This opens the Non-IT Assets list view page.
4. Select the Non-IT assets to be modified of their state by enabling the check box. Click on **Actions** menu and select **Modify State** option. This opens the **Modify State** pop up window.
5. Select the **State** from the combo box.
6. **Save** the changes.
Viewing Non IT Asset Details

To view the Non-IT Details,

1. Log in to the AssetExplorer application using your **user name** and **password**.
2. Click **Assets** tab -> click Non IT asset link on the left hand side of the page. This opens Asset View List page.
3. Click the asset name to view the asset details. By default Resource Info tab details are displayed.

Viewing Resource Info Details

**Resource Info** tab displays the Resource Details such as, Resource Name, Tag, Bar Code, Serial No, Region, Cost, Acquisition Date and many other details are displayed.

Viewing Relationships

This relationship tab shows the Non-IT assets association to other Assets, Business Services, Users and Components. On clicking the tab -> click the **Add Relationship** button on the top right hand side of the page.

Connection Relationship

1. Click the Connection Relationship option from the list. This opens the **Connection Relationship** page.
2. To connect the assets to other assets select the **Assets** radio button.
   1. Select the assets to be connected from the **Asset List**.
   2. Move the selected asset to the **Connected Assets list** using the >> button.
   3. Save the details. You can see the connected assets under the **Connected to Assets** block.
3. To connect the assets to the **Business Services** select the corresponding radio button.
   1. Select the business services from the list to be connected to the assets such as, Email, Internet Access and so on.
   2. Move the selected assets from the **Business Service** list to the **Connected Services** list using the >> button.
   3. **Save** the changes. You can see the connected business services under the **Business Services** block.

Usage Relationship

1. Click the Usage Relationship option from the list. This opens the Usage Relationship page.
2. Select the **Assign the asset to User/Department** radio button to associate the asset to the user/department.
   1. Select the **User** from the combo box.
   2. Select the **Department** to be associated from the combo box.
   3. If the **Asset is Leased** then select the corresponding check box.
   4. **Save** the changes. (Or)
3. Select the **Associate to Asset** radio button to assign the asset to the asset.
   1. Choose **Asset** to be associated from the combo box.
   2. **Save** the details.
Container Relationship

1. Click the Container Relationship option from the list. This opens the Container Relationship page.
2. Select the Components radio button to associate the components to the user. Select the type of components to be displayed in the list by selecting it from the choose product combo box.
3. Choose the Product from the combo box.
4. Select the components from the Components List and move it to the Attached components list using >> button.
5. Save the details.

Viewing History of Non IT Asset

Click History tab to view the Non IT Asset history. This gives the complete Non IT - Assets Resource Ownership History on date and State of the components.

Viewing Contracts of the Non IT Asset

Click Contracts tab to view the contracts attached to the Non IT Asset. This gives the complete details about the contract such as, vendor name, support details, contract rules, expiry date, cost and other rules.

Viewing Costs

1. Click Costs tab to view the costs associated to the Non IT Asset.
2. Click Add Cost button to add cost to the Non IT Asset.
3. Select the Cost Factor from the combo box. For ex. Service Cost. This is a mandatory field.
4. Specify the description about the cost in the description field. Say if the cost factor is service cost you can specify important information about the service cost.
5. Specify the Amount in $ in the Amount field. This is a mandatory field.
6. Select the Date from the calendar button.
7. Click Add Cost button to add the cost. You can see the cost added to the Non IT Asset shown in the Other Costs list view page.
Copy Resource

Using Copy Resource option you can make multiple copies of the resource and its details. On making multiple copies of the resource, it becomes easier for the technician to add bulk of similar assets. The technician need not manually enter all the resource details for each resource. The new copies of the resource will be assigned with new asset name and rest of the details is retained as is.

To Copy Resource,

1. Log in to the AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Click Non-IT Assets under Assets block on the left hand side of the page. Select the respective Non-IT assets link. e.g. Access points, Printers and so on. This opens the corresponding IT asset page.
4. Click the Title of the assets to be duplicated. This opens the Asset details page.
5. Click the Actions menu on the right hand side of the page. Select Copy Resource option. This opens the Copy Resource pop up window.
6. Specify the Number of Copies in the given numeric field. The maximum value you can enter is 9. If you need more than 9 copies of the Non-IT asset, then you need to invoke Copy Resource again.
7. Click Copy to make the copies of the Non-IT asset. The new copies of the Non-IT asset will be assigned with new asset name that will uniquely identify them. The rest of the information is retained as is. While copying a resource, the owner name will not be available for the copied resource. If needed you can also edit the resource details.
Attach Asset

To attach assets to Non-IT assets,

1. Log in to AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane, this opens the assets home page.
3. Click Non-IT Assets under Assets block on the left hand side of the page. Click any of the Non-IT asset link from the list. This opens the Non-IT Assets list view page.
4. Click the Non-IT asset name to be attached with an asset. This opens the Non-IT assets details page.
5. Click the Actions combo box -> select the Attach Asset option from the list. This opens the Attach Asset pop up window.
6. If you would like to display the list of all Non-IT assets or filter down specific Non-IT asset then select the Non-IT assets to be displayed from the List combo box. Ex: projectors, scanners and so on. Also select the type of asset such as asset in store, in use and so on from the of type combo box.
7. You have two columns, Asset list and Attached Assets list. Select the Non-IT assets to be attached from the Asset list and move it to the Attached assets list using the >> button. To remove the assets from the attached assets list use the << button.
   **Example:**
   If you would like to attach a scanner to a workstation then select the list of assets to be attached from the assets list and move it to the attached assets list.
7. **Save** the changes. If you would like to detach all the attached assets then select the **Detach All** option.
Attach Component

To attach component to an Non -IT asset,

1. Log in to AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane, this opens the assets home page -> select Non-IT Assets under Assets block on the left hand side of the page. Click the specific Non - IT asset link. This opens the Non-IT assets list view page.
3. Click the title of the Non-IT asset to be attached with an component. This opens the Non-IT asset details page.
4. Click the Actions combo box and --> select the Attach Component option from the list. This opens the Attach Component pop up window.
5. If you would like to display the list of all components or filter specific components then select the components to be displayed from the List combo box. Ex: keyboard, mouse and so on. Also select the type of component such as component in store, in use and so on from the of type combo box.
6. You have two columns, such as Component list and Attached Components list. Select the components to be attached from the components list and move it to the attached components list using the >> button. To remove the component from the attached component list use the << button.
   
   **Example:**
   
   If you would like to attach a keyboard and a mouse to a workstation then select the list of components to be attached from the component list and move it to the attached component list.

7. Save the changes. If you would like to detach all the attached components then select the Detach All option.
Attach Document

To attach document to an Non-IT asset,

1. Log in to AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane, this opens the assets home page -> select the Non-IT Assets link under the Assets block on the left hand side of the page. Click the corresponding Non-IT asset link. This opens the Assets list view.
3. Click the title of the asset to be attached with an document. This opens the asset details page.
4. Click the Actions combo box -> select the Attach Documents option from the list. This opens the Attach File pop up.
5. Click the Browse button to select a file.
6. On selecting the file, click Attach File button to attach the document.

Note: You can attach any number of files up to 10 MB.
Assigning Non-IT Assets to User and/or Department

To assign Non-IT asset to User and/or Department,

1. Log in to AssetExplorer application using your user name and password.
2. Click the Assets tab in the header pane. This opens the assets home page.
3. Select the Non-IT Assets title under the Assets block. Select the specific Non-IT Asset link. This opens the Non-IT Assets list view page.
4. Click the Non-IT assets to be assigned to a Department and/or User by enabling the check box.
5. Click the Actions menu and select Assign option from the list. This opens the Assign/Associate pop-up window.
6. Select the User Name to be assigned of the asset from the combo box.
7. Select the Department name from the combo box.
8. Save the details.
Software Asset Management

AssetExplorer scans your network and automatically discovers all softwares available in the workstations. From the Software Dashboard, Asset Managers can

- group the softwares according to the Manufacturers and the Site in which they are associated.
- easily ensure compliance by keeping a check on the list of compliant, under licensed and over licensed software.
- facilitate easy access to view the total number of softwares that are unused, rarely used, managed, prohibited and unidentified for the selected Manufacturer and Site.
- view the number of expired license agreement, agreement to be expired in the next 7 days and agreement to expire in the next 30 days.
- Software Metering - tracks the usage of software in each workstation.
Scanned Software

While scanning workstations, the softwares installed in the workstations are also scanned and listed under Scanned Softwares in the Software tab. From the Scanned Software list view page, you can acquire details such as, Manufacturer, Software Type, number of Installations of the software and so on.

The page also includes various useful functionality such as,

- Option to view the scanned softwares based on the Sites, Manufacturer and Software Type.
- Customize columns to be displayed in the List View
- Set the number of softwares to be displayed per page.
- Perform bulk operations such as delete, change category and software type of softwares.

Representation of icons in the List View:

- Software which are Compliant.
- Software the Compliant Type as Under License. The number of license installation is less than the amount purchased.
- Software with Compliant Type as Over License. The number of license installation is more than the amount purchased.
- Softwares for which the Compliant is not applicable.
- Select the columns to be displayed in the list view.
- Search for softwares on entering the manufacturer, category, type and so on.

From the List View page you can,

1. **View Softwares based on Filter:** You can filter softwares based on the Sites, the Software Manufacturer and the Software Type. Say, If you require to view of all the managed softwares from Adobe Systems, select the Manufacturer as Adobe Systems and the Software Type as Managed.

2. **Set the number of softwares per page and navigation buttons:** You can set the number of softwares to be displayed per page in the List View page.

3. **Adding New Software:** Add New Software apart from the existing scanned softwares.

4. **Bulk Operations:**
   - **Move:** Option to move the bulk softwares from one software type to another.
   - **Change Category:** Option to change the category of bulk softwares.
   - **Delete:** Option to bulk delete softwares.
Adding New Software

Apart from the Scanned Softwares in the Software List View, you also have an option to add new softwares.

To add new Software,

1. Click **Software** tab in the header pane.
2. Click **Software** -> Scanned Softwares under **Assets** block. By default, all the scanned softwares is listed.
3. Click **New** button.
4. In the Add Software form, specify the **Software Name**. Say, Adobe Photoshop. This field is mandatory.
5. Specify the **Version** of the software. Say 7.1, 7.2 and so on.
6. Select the **Software Type** from the drop down. Say, Freeware, Managed and so on.
7. Select the **Software Category** from the drop down. Say Graphics, Operating System and so on. This field is mandatory.
8. Select the **Manufacturer** of the software from the drop down. If required, you can also add the manufacturer on clicking the **Add** icon.
9. Specify relevant information about software in the **Description** field.
10. Click **Add** button. The software is added in the List View.
Viewing Software Details

The details of the software added by you is displayed under the Software Details page. Apart from viewing the software details, you can also perform various actions on the software such as,

- changing the software type
- adding and associating a software license to the software
- adding a new license agreement, and
- associating minor versions to the software

To view the software details page,

1. Select **Software -> Scanned Software** under **Assets** block.
2. From the software view list page, select the Software Type as **Managed** from the **Filter** drop down. All the licensed software are listed.
3. Click the software name to view the software details. The page opens to display **Software Details** tab and **License Agreements** along with the **Actions** drop down.

Software Details

The details added by you in Add New Software is displayed under this block. In addition, the software license associated to this product is also displayed as Purchased License. You can also change the software category and type by clicking **change** link beside the fields.

From the Actions drop down, you can perform various actions such as Changing the Software Type, Add Software License, adding a new license agreement and associating minor versions.

In addition, you can also view the list of workstations with the licensed installed, workstations with unlicensed installations and number of software licenses purchased.

Licensed Installations

Under Licensed Installations, all workstations with the licensed software installed is listed. You can view details like, the license version, the software usage, license key and the license allocated. You also have an option to De-allocate the license from the workstation.
Un Licensed Installations

Under Unlicensed installations, all workstations with unlicensed installation of the software is listed. You can allocate license to a single machine or to all the machines in the list.

Allocate Licenses to a single machine

1. Click the Attach License to Software icon.
2. From the available license listed in Select Software License pop up, enable the radio button beside the license name to allocate to the software installed in the workstation.
3. Save the changes. The software installed in the workstation is licensed and is listed under the Licensed Installations column.

Allocate Licenses to multiple machines

1. Select the workstations to allocate licenses by enabling the check box.
2. Click Allocate License button to allocate licenses to bulk of workstations. It takes all the unallocated licenses and assign it to the workstations automatically.

Purchased Licenses

Under Purchased licenses, you can view the number of purchased licenses, license type, Installation details, license key details etc.

Deleting the Purchased License

1. Enable the check box beside the purchased licenses from the list you wish to delete.
2. Click Delete button. A confirmation window pops up.
3. Click OK to proceed. The softwares licenses is deleted from the list.

Move Licenses

You can move all the unallocated purchased license to sites.

1. Select the site from the Move Licenses To check box.
2. Enable the check box beside the licenses to be moved to the selected site.
3. Click Move button. You can change site by selecting the site from the site option at the top left of the page.

License Agreements

Software license agreement is a contract between the software vendor and the purchaser. It is often called as the end user license agreement. The license agreement consists of terms and conditions on how to use the software in the organization.
You can **Filter** to view the license agreement based on the active and expired agreements. In addition, you can also add license agreements and delete the existing license agreement for this software.
Changing Software Type

Using this option, you can change the existing type of the software, say, from Shareware to Managed. You can change the software type either from the software list view page or from the software details page.

Changing Software Type from Software List View

From the software list view page, you can change the software type for bulk softwares instantly and with ease.

1. Select **Software -> Scanned Software** link from the **Assets** block. All the scanned softwares are listed.
2. Enable the check box beside the software to change the software type.
3. Choose the **Software Type** from the drop down and click **Move** button. The software type for the selected software is changed.

Changing Software Type from the Software Details page

Change the software type for individual softwares using this option,

1. From the Software details page, select the software name. The software details page opens.
2. Click the **Actions** tab -> **Change software type** option. The change software type window pops up.
3. Select any one of the listed software type. Say Managed.
4. Click **Change** button to change the software type. The software type changes to managed in the software details page.
Changing Software Category

Using this option, you can change the existing category of the software. Say, from Graphics software to Multimedia software so on.

1. Click the **Software** -> **Scanned Software** under **Assets** block. All the scanned softwares are listed.
2. Enable the check box beside the software to change the software category.
3. Click **Change Category** button. The Change Software Category to window pops up.
4. Select the software category from the list, say Accounting, Development.
5. **Save** the changes. The category for the selected software is changed.

![Image of software category change interface]
Associate Software Minor Versions

With ManageEngine AssetExplorer, you can group all minor versions of the software under the major version.

Say, A company buys Adobe Photoshop 7.0 with 4 licenses. The license is applicable for both 7.1 and 7.2 versions and vice versa. In this case 7.0 is the major version and 7.1 and 7.2 are the minor versions. The licenses purchased are the same for all the three versions.

Assume Adobe Photoshop 7.0 is installed in two different workstations, and 7.1 and 7.2 are installed in two other separate workstations. On performing a scan before grouping, AssetExplorer shows the list as different single entries. The purchased license for the software is displayed as ‘4’ for the version 7.0 and ‘0’ purchased for the other versions (7.1 and 7.2)

Using Associate minor versions option you can group 7.1 & 7.2 minor versions under 7.0 major version. This shows the software list to be a single entry with the number of purchased licenses and installations. Thus helps you in avoiding individual entry for each version of the software. And also helps in easier management of the installed software for the assetmanager.

1. Click **Software** title under **Assets** block. Click **Scanned Software** link. This opens software list view page.
2. Click the software name. This opens the software details page.
3. Click **Actions** tab on the right hand side upper corner of the page. Click **Associate Minor Versions** option. This opens Associate minor versions page.
4. Select the managed software (licensed) to be grouped of minor versions from the list. Click **>>** button to move the selected managed software to the Version Group list. By moving the selected managed software under **Version Group**, all the minor versions will be associated with the major version.
5. Click **Save** button. You can see all the added minor versions getting displayed in the software details page under the title **Software - All Versions**.
E-mailing Users

Technicians can communicate to the users who have installed the software instantly by send email from the software details page. With this option, technicians can communicate with the users for any event occurred or to get information from users.

1. Click **Software -> Scanned Software** link under **Assets** block. All the scanned softwares are listed.
2. Click the software name to open the software details page.
3. Click **Actions** tab -> **Email users** option. The **Email Users** page pops up.

4. Specify the **To** email address in the given field.
5. By default you have subject and description provided for the email. If required, you can edit and specify the **Subject** and **Description** about the email in the fields.
6. Click **Send E-mail** button. The email is sent to the mail ID provided in the To field.
License Agreement

Software License Agreement is a contract between the software vendor and the purchaser. Software companies often make special contracts, such as contract for support and warranty with large businesses. Also, the license agreement consists of the acquisition date, expiry date, terms and conditions on how to implement the software in the organization. These documents are called as the End User License Agreement (EULA).

ManageEngine AssetExplorer provides an option to maintain the license agreements in the database by adding the license agreement in the application. Also you can associate the license agreement with the software licenses.

Adding New License Agreement

1. Click **Softwares** -> **License Agreement** under **Assets** block. The available license agreement is listed.
2. Click **Add New** button.
3. Select the **Manufacturer** of the software for which the license agreement is created from the drop down. If the manufacturer is unavailable in the list, select the add new icon ![Add New Manufacturer](image). Enter the **Manufacturer** and **Description** in the pop up.

4. Specify the **Agreement Number** and **Authorization Number**. The Agreement Number is a mandatory.
5. Select the **Acquisition Date** and **Expiry Date** of the software using the calendar icon.
6. Select the **Vendor** from whom the software was purchased from the drop down. If the vendor detail is unavailable in the list, select the add new icon ![Add New Vendor](image) and enter the **Vendor Name**, **Description** and name of the **Contact Person**.
7. Specify the **Description** and **Terms** for the license agreement.
8. If required, you can also attach relevant documents to the agreement. Click **Attach File** button. **Browse** through the file and click Attach file.
9. You can add additional license agreement fields directly from this form by clicking **Add More Fields**.

You can choose the type from Single-line, multi-line, picklist, numeric and date/time fields. Enter the **Label** and **Default Value** (for single-line and multi-line) to be displayed in the form.

10. Specify the Purchase and Invoice Details such as, **Purchase Order Number**, **Purchase Order Name**, the date of purchase of the software in the respective fields.
11. Also, enter the **Invoice Number**, **Invoice Date** from the calendar icon and the **Total Cost** of the software.
12. You can either **associate the license with an existing software license** (provided there are unassociated license available for the selected manufacturer) or **add a new software license and associate the agreement**.

**Associating existing license to agreement**

1. Click **Associate to Existing License** button.
2. From the Associate Existing License pop up window, choose the **Site** and **Software** from the filter drop down.
3. Enable the check box beside the license to be associated with the license agreement.
4. Click **Associate to agreement** button. The selected licenses is associated and listed below the Purchase Software License block.

**Add New License and Associate**

You can instantly add a software license and associate it to the license agreement.

1. Click **Add New License and associate** button.
2. From the pop up window, select the **Software**, **License Type**, **License Options**, **Installations Allowed**, **License Key** and the **Cost ($)** from the drop down. The License Type, License Options and Installations Allowed are mandatory fields.
3. You can add licenses for other softwares by clicking the **Add** icon and repeat the steps as above.
4. Click **Associate to agreement** button. The license is associated and listed below the Purchase Software License block.

13. You can notify users before the license agreement expires by selecting the users to be notified from the **Users List**. Click >> button to move the selected user to **Notified User List** block.
14. Select the **Days** before which the selected users should be notified of the license agreement expiry. If you have selected the users to be notified of the license expiry then this field is mandatory.
15. Click **Save**.
Editing and Deleting License Agreement

You can modify and delete the existing license agreement from the application.

Edit License Agreement

1. Select **Software** -&gt; **License Agreement** under **Assets** block. The list of available license agreement is displayed.
2. Select the Agreement Number of the license agreement to edit.
3. From the License Agreement details page, click **Actions** -&gt; **Edit Agreement** option. The Edit License Agreement form appears with details populated while creating the license agreement. The Manufacturer field is non-editable.
4. Modify the details and Save the changes.

Delete License Agreement

1. Select **Software** -&gt; **License Agreement** under **Assets** block. The list of available license agreement is displayed.
2. Select the check box beside the license agreement(s) to delete.
3. Click the **Delete** button. The license agreement(s) is deleted from the list.
Printing the License Agreement

You can preview and print the entire license agreement details using Print Preview option.

To print the license agreement,

1. Click **Software -> License Agreement** under **Assets** block. The list of available license agreement is displayed.
2. Select the Agreement Number of the license agreement to print.
3. From the License Agreement details page, click **Actions -> Print Preview** option. The license agreement details appears in a printable form in a pop up window.
4. Click **Ctrl + p** keys to print the contract details.
5. Set the required options and click **OK**.
Software License

ManageEngine AssetExplorer helps you to manage software licenses installed across the enterprise. You can consolidate and manage all your software licenses from a single screen. AssetExplorer will scan and automatically pickup license keys for Microsoft Windows and Microsoft Word. You can key-in all the licenses purchased earlier and track future purchase of software licenses through the Purchase module.
Adding Software Licenses

Using this option, you can create a software license for the existing software.

The software license form can be accessed by two ways in AssetExplorer application.
   a. Create New drop down
   b. Software tab

Create New drop down

The Create New drop down is a quick navigator to instantly access the Software License form from the home page.

To add a new Software License, go to Step 2 in Software tab.

Software Tab

1. Click Software tab in the header pane to open the Software dashboard.
2. Select Software -> Software License under Assets block. The list of available software license is displayed.
3. Click Add New button.
4. Select the Manufacturer of the software.
5. The list of managed softwares available for the selected manufacture is listed in Managed Software drop down. Select the software for which the license is created.
6. Select the Vendor Name from the drop down. If the vendor is not available in the list, you can add a new vendor on selecting the Add New link. In the pop up, specify the Vendor Name, Description and Contact Person, and save the changes.
7. Select the date of purchase of the software from the calendar button in **Acquisition Date** field.

8. Select the **Expiry Date** of the software from the calendar icon.

9. Specify the cost of the software per license in **Purchase Cost** field.

10. Select the department for which the software was purchased in **Purchased for** drop down list.

11. If you have configured Sites, select the site name where the licensed software is installed, from **Allocated to Site** drop down.

12. Select the **License Type** from the drop down. Each manufacturer has their unique license type apart from the several common license types. Some of which are,
   - **Individual**: License type for single installation
   - **OEM (Original Equipment Manufacturers)**: License type for softwares that are already installed in the hardware.
   - **Named User License**: License Type for a specific user.
   - **Volume**: License Type supporting multiple users.
   - **Client Access License (CAL)**: License type that gives a user the rights to access the services of the server.
   - **Trial License**: License Type for trial versions of a software.
   - **Enterprise (Perpetual)**: License Type that does not require renewal and is for life long.
   - **Concurrent License**: License Type for a software that can be accessed by a specific number of users at a time.
   - **Free License**: License Type for freeware softwares.
   - **Enterprise Subscription**: License Type that requires renewal for every specific period.
   - **Node Locked**: License Type for workstations with specific configurations.

**Individual License/OEM**

1. Select the **License Option** as either Full Package Product (FPP) or Others from the drop down.

2. Specify the **Number of licenses** required for the selected product.

3. Enter the **License Key(s)** for the software in the given text box. The license keys values should be in comma separated values format. Say XBVJD,YCCYR,7DF28,JH2PX,MYT7M.

4. **Save** the details. The license is listed in the software license list view page.

**Volume License/Trial License**

1. Mention the **Number of licenses** required for the selected product.

2. Specify the number of **Installations allowed** per license.

3. Specify the **License Keys** in the given text field. Say XBVJD,YCCYR,7DF28,JH2PX,MYT7M.

4. **Save** the details. The license is listed in the software license list view page.

**Client Access License (CAL)**

The Client Access License consists of the following License Options,

- **Per Seat-Device/ Per Seat-User**: License given to each unique user/device to avail the server software product. The number of CALs is equal to the number of devices/users accessing the server software.
- **Per Server**: License given to each server. The number of devices accessing the server simultaneously is limited and is primarily recommended for servers that require limited access.
- **Per Processor**: Connect unlimited users/workstations to the server product.
- **Per Mailbox**: License for each mailbox using Exchange Server.

Select the **License Option** from the combo box.

**Per Seat-Device**

1. Enter the required **Number of CALs**.
2. Specify the **License Keys** in the given text field. Say XBVJD,YCCYR,7DF28,JH2PX,MYT7M.
3. If there are any additional information required, then the same can be specified under **Additional Information** block.
4. You can select the workstations that can access the software from **Choose CAL Installation** block. Select the workstation by either choosing the client software from **Filter by** or from **Departments** drop down. You can also search for the workstation on entering the name in **Search** field and selecting Go button. The list of server/workstations is displayed. Select the workstations. Click >> button to move to CAL Installation box. **Note**: The number of workstations selected should be lesser than or equal to the specified number of CALs.
5. **Save** the details. The license is listed in the software license list view page.

**Per Seat-User/ Pre-Mailbox**

1. Specify the details similar as above.
2. Instead of selecting the workstations from Choose CAL Installation block, choose the **Users** to access the software from the list displayed.
3. **Save** the details. The license gets listed in the software license list view page.

**Per-Server**

1. Specify the details similar as in Pre-Device.
2. Associate the specified number of CALs to the server selected from **Associate to Server** drop down list.
3. **Save** the details. The license gets listed in the software license list view page.

**Per-Processor**

1. Specify the **Number of Processor(s)** that supports the ability to connect unlimited users/workstations in the given field. Since unlimited users/workstations can connect to the server software product the CAL Installation block is not available.
2. Specify the details as configured above.
3. **Save** the details. The license is listed in software license list view page.
Viewing Software Licenses

The details of the software license added by you is displayed under Software License details page. Apart from viewing the software details, you can also view the workstations allocated with the software license, any relevant document attached and the contracts associated to the software license.

To view the software license details,

1. Select **Software -> Software License** under **Assets** block. The list of available software license is displayed.
2. Click the software license name to view the software details. The page opens to display **License Info** and the **Contracts** tab.

```
Acme Media Player-1518
Acme Media Player
```

```
License Info | Contracts
---|---

**Software License Details**

<table>
<thead>
<tr>
<th>License Name</th>
<th>Acme Media Player-1518</th>
<th>Manufacturer</th>
<th>Acme</th>
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<tbody>
<tr>
<td>Software</td>
<td>Acme Media Player</td>
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<td>3320102422060</td>
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<td>Description</td>
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</table>

**Allocated To**

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<th>Site</th>
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</thead>
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<td>me-amc02.helpdesk-test.com</td>
<td>Not Known</td>
<td>ADERF</td>
<td>Acme Media Player-1518</td>
<td>Sydney</td>
</tr>
</tbody>
</table>
```

**Attached Documents**

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<th>No</th>
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<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>assetexplorer.html</td>
<td>10.02KB</td>
</tr>
</tbody>
</table>
```
License Info

The details added in the New Software License form is displayed under this block. Apart from the details added, you can also view the license agreement number associated with the Software.

From this page, you can Edit and Attach relevant documents the software license using the options from the Actions drop down.

Contracts Tab

Contracts associated to software is listed under the Contracts tab. You can add a new contract under the Contracts tab.
Editing and Deleting Software License

ManageEngine AssetExplorer provides you with the option to modify and delete the existing software license.

Edit Software Licenses

1. Select **Software -> Software License** under **Assets** block. The list of available software license is displayed.
2. Click the software license name to be edited.
3. From the software details page, click **Edit** tab. [OR] Click **Actions** tab -> **Edit** option. The **Edit Software License** page opens.
4. Modify the required fields and **Save** the changes.

Delete Software Licenses

1. Select **Software -> Software License** under **Assets** block. The list of available software license is displayed.
2. Enable the check box beside the software licenses to be deleted.
3. Click **Delete** button. A confirmation dialog box appears.
4. Click **OK** to proceed. The software license(s) is deleted from the list.
Attaching Document to Software Licenses

You can attach relevant documents to the existing software license from the software details page,

1. Select Software -> Software License under Assets block. The list of available software license is displayed.
2. Click the software license name to attach the document. The software license details page opens.
3. Click Actions tab -> Attach Documents option from the list. The Attach File pops up.
4. Click Browse button to select a file.
5. On selecting the file, click Attach to attach the document.

Note: You can attach any number of files up to 10 MB.
Service Packs

AssetExplorer keeps track of all the service packs such as hotfix, security update, installer, on scanning the workstations.

To view the Service Packs details,

1. Click **Software** title -> **Service Packs** link under **Assets** block. The service pack list view page opens.
2. Click the service pack name to view the service pack details.

The details page displays the complete detail about the service pack with number of installations, and installation without service packs. It also provides information on the number of software the service pack applies to.

Say, If the service pack **Security Update for Windows XP** is applicable for **Microsoft Windows XP Professional** and **Microsoft Windows 2000 Professional** then this software list would be displayed before the service pack installations list.

![KB931784](image)

<table>
<thead>
<tr>
<th>Service Pack</th>
<th>KB931784</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Security Update for Windows XP (KB931784)</td>
</tr>
<tr>
<td>Installations</td>
<td>0</td>
</tr>
</tbody>
</table>

**Applies To Software**

- Microsoft Windows XP Professional
  - [Software Installations: 2 | Installations without Service Pack: - ]
- Microsoft Windows 2000 Professional
  - [Software Installations: - | Installations without Service Pack: - ]

**Service Pack Installations**

Under this block you get the list of all service pack installations with the Workstation name, User name, Installed On and Installed By details.

**Software Installations without Service Packs**

Under this block you get the list of all software installations without the service packs along with the Workstation name, User name, Software and Usage details.
Editing and Deleting Service Packs

AssetExplorer gives you an option to modify and delete the existing Service Packs.

Edit Service Packs

1. Click **Software** title -> **Service Packs** link under **Assets** block. The service pack list view page opens.
2. Select the Service Pack name to be edited from the list.
3. From the Service Pack details page, click the **Edit** button. This opens the Edit Service Pack page.

![Edit Service Pack](image)

Modify the **Service Pack Name**, **Type** and **Description** of the service pack. Also, you can add software or service packs to the existing service pack list. To add to the list, select from the available list of software and move to the selected software using >> buttons.

6. **Save** the changes.

Delete Service Packs

1. Click **Software** title -> **Service Packs** link under **Assets** block. The service pack list view page opens.
2. Enable the check box beside the Service Packs to be deleted from the list.
3. Click **Delete** button. A confirmation message appears.
4. Click **OK** to continue. The Service Pack(s) is deleted from the list.
Groups

ManageEngine AssetExplorer helps you to organize assets by grouping them based on certain asset properties. Grouping assets gives a more fine-grained control over the assets, enabling you to manage them effectively. Say, for instance, when you are getting ready for migration, you will be able to pinpoint assets with 256MB RAM that need upgrade before rolling out Windows Vista.

There are two types of asset grouping in AssetExplorer.

- **Static Group**: Lets you group assets as per your wish.
- **Dynamic Group**: Groups assets based on certain criteria like Product Type, Department, OS, Manufacturer and so on.

- Creating New Group
- Removing Assets from a Group
- Editing and Deleting Group
Creating Asset - Groups

To access Groups in AssetExplorer,

1. Log in to AssetExplorer application using your **Username** and **Password**.
2. Click **Assets** tab in the header pane.
3. Click **Groups** in **Assets** block on the left hand side of the page.
4. Click **New Group** link. The **Create Group** form is displayed.

Creating a Group

1. Specify a name for the group in **Group Name** text field. This is a mandatory field.
2. Specify relevant information about the group in the **Description** field.
3. Select the **Group Type** by enabling anyone of the radio button.
   - **Static Group**: Grouping assets as per your wish. By default, this option is enabled.
   - **Dynamic Group**: Grouping assets based on certain criteria.
4. Click **Save** button to save the group. The **Edit Group** page is displayed and based on the selected Group Type, you can either pick assets from the existing list or you can define criteria to group assets.

Adding Assets to Static Group

1. In **Pick resources to add** block, select the filter criteria from **Showing** drop-down list. For instance, the filtered criteria is **All Assets** in state **In Use**. This will list all assets with asset state as **In Use**.
2. If your asset list is lengthy, then you can conduct a search for assets by specify the **Search** criteria.
3. From the list of assets under **Pick resources to add** block, select the check box beside the asset to add to this group.
4. Click **Add** button. A message confirming the number of items added to the group is displayed along with a **View** button.
5. Click **View** button to view the assets in the group.
   
   **NOTE:** To delete assets from a static group, refer Removing Assets from Static Group.

Adding Assets to Dynamic Group

1. In **Dynamic Group Criteria's** block, you can define the **criteria** and **condition** to filter assets according to specific asset properties. The **Criteria** drop-down lists criteria based on **Resources** like product type, vendor, department, etc and **Workstation Criteria** such as model, OS, Processor Type, IP Address and so on.
2. Select the **Criteria** and the **Condition** from the drop-down list.
3. Click **Choose** button to select the resource or workstation based on the selected criteria. Click **OK**. The selected criteria and condition is displayed. Say, for instance, you have selected the criteria as **"Product Type"** and conditions as "**is**". On clicking choose button you will get the list of all product types such as, access points, scanners, keyboard, printers and so on.
4. If you have defined more than one criteria, then select any one of the **Match Criteria** radio buttons i.e., Match ALL of the following (AND) or Match ANY of the following (OR).
5. Click **Save & View Group** button to save the defined criteria and view resources in the group.
Editing and Deleting Groups

Editing Groups

1. Log in to AssetExplorer application using your Username and Password.
2. Click the Assets tab in the header pane.
3. Click Groups in Assets block on the left hand side of the page.
4. Click Manage Groups link.
5. From Manage Group window, click Edit link beside the group to edit. The Edit Group page is displayed.
6. If you are editing a Static Group, then you can either add assets to the group or you can remove existing assets from the group. For Dynamic Group, select the criteria and conditions from the drop-down list.
7. If you want to change the name of the group, then select Edit button beside Group block in Edit Group page.
8. Edit the Group Name and Description. The Group Type is in non editable text.
9. Click Save button.

Deleting Groups

1. Log in to AssetExplorer application using your Username and Password.
2. Click the Assets tab in the header pane.
3. Click Groups in Assets block on the left hand side of the page.
4. Click Manage Groups link.
5. From the Manage Group window, click the corresponding Delete link to be deleted on the right hand side of the page.
6. A pop up window pops up to get your confirmation on the delete operation. Click OK to proceed. You can see the group deleted from the list.
Removing Assets from Static Group

You can remove assets from a static group but you cannot remove resources from a dynamic group. Removing assets from the static group can be performed in two ways,

1. From the list view page of the Static Group, or
2. While editing a Static Group.

Removing Assets from the Static Group list view page

To remove assets from the list view page of the Static Group,

1. Click **Assets** tab in the header pane.
2. Click **Groups** in **Assets** block on the left hand side of the page.
3. Click **Manage Group** link.
4. From the Manage Group window, click the static group. The list of assets grouped to the selected static group is displayed.
5. Select the check box beside the asset name to remove from this static group.
6. Click **Remove from Group** button. The selected assets are removed from the list.

Removing assets while editing a static group

To remove assets from the static group while editing,

1. Click **Assets** tab in the header pane.
2. Click **Groups** in **Assets** block on the left hand side of the page.
3. Click **Manage Group** link.
4. From the Manage Group window, click **edit** link beside the static group.
5. In **Resources in group** block, select the check box beside the resource name to remove from the static group.
6. Click **Remove** button. The selected assets are removed from the list.
Configuration Management Database (CMDB)

Configuration Management Database (CMDB) is a centralized repository that stores information on all the significant entities of your IT environment. The entities, termed as Configuration Items (CIs) constitutes of Hardware, the installed Software Applications, Documents, Business Services and People that are part of your IT system. Unlike the asset database that comprises of a bunch of CIs, the CMDB is designed to support a vast IT structure where the interrelation between the CIs are maintained and supported successfully.

Each CI within the CMDB is represented with Attributes and Relationships. Attributes are data elements that describe the characteristics of CIs under a CI Type. For instance, the attributes for CI Type Server would be Model, Service Tag, Processor Name and so on. Relationships denote the link between two CIs that identifies the dependency or connection between them.

CMDB functions as an effective decision making tool by playing a critical role in impact analysis and root cause determination. In the following documents, you will take a look at Configuring the CMDB configurations, Defining the CI Relationships and viewing the Relationship Map.
Populating CIs in CMDB

The CMDB functions as a decision making tool, impact and root cause analyzer when catered to the IT environment. But, by populating a large amount of data, your CMDB may turn complex, causing a loss in structure and information, making its analysis less effective.

So how can you build an efficient CMDB without turning it complex? AssetExplorer gives you a step-by-step process to identify and populate the CIs in your CMDB.

Steps to populate CIs in CMDB

To set up a less complicated CMDB design, strategize on your CI List and their supported attributes and relationships. Given below are 3 easy steps through which you can effectively populate CIs in your CMDB.

**Step #1: Narrow down the CI List**

The first step is to identify the business critical CIs as per your organizations environment and group them in appropriate CI Types. Each CI Type holds its own attributes and relationships that are defined with key stakeholders from the Service Catalog Management, Change Management and the likes.

Some of the entities that can contribute to your CI list are,

- Business Service
- Hardware (IT and Non IT assets, components)
- Software (which are installed in the server/workstation like applications, operating systems, database)
- Department
- Documents (license agreement, contract, lease agreement)
- Users and Support Groups

*Note:* Softwares which are installed in the server/workstation with a CI Type are considered as CIs.

**Step #2: Populating the Configuration Items**

Once, the CI List is strategized and confirmed, you need to populate the Configuration Items. ManageEngine AssetExplorer gives you various ways through which you can effectively populate CIs into your CMDB.

- **Populating Workstation/Devices**
  - Windows Domain Scan
  - Network Scan

- **Populating Users/Technicians**
  - Importing from Active Directory (for Windows machine)
  - Importing from LDAP
Populating other CIs such as IT services, Business Services, Department

- Importing CIs from CSV file
- Manual Addition of CIs

**Note:** Make sure that the CI information in your CMDB is updated from time-to-time.

**Step #3: Creating the information model**

The overall information model is complete only when the relationships between the CIs are defined. While populating Configuration Items using any of the methods in Step 2, the interdependencies between the CIs are identified and established. The relationships can be viewed from the **Relationship Map** which helps in impact and root cause analysis.
CMDB - Admin Configurations

Configuration Management Database (CMDB) module can be accessed by the administrator, and technicians with CMDB Role. If you are the administrator or technician having access permission to the CMDB module, then before you go ahead configuring the CIs and their relationships, you need to configure the following Admin configurations,

- Configuration Item Types (CI Types) - Categorize your CIs under specific CI Types.
- Relationship Type - Configure the nature of relationships set between different CIs.
- Configuring Impact - Configure the levels of Impact that can be caused by a CI on a Business Process.
- Import CIs from CSV - Manually entered your organizations CIs on a CSV file? Import them instantly into the application using this option.
Configuration Item Types (CI Types)

Configuration Item Types (CI Types) denote the broad classification of different entities with which you can categorize the CIs. It forms the uppermost level in the CI structure, enabling you to easily add and modify the CIs and their relationships. For a granulated CI Type structure, you can further drill it down to Sub Types. The CI Types are defined with certain attributes and relationships that are unique for the CIs classified under them.

To access the Configuration Item Type page,
1. Click **Admin** tab in the header pane.
2. Click **Configuration Item Types** icon in CMDB block. The configuration item types list view page opens, listing the default CI Types. From this page, you can add CI Types, create new CIs for a CI Type, view CIs under a CI Type, and also view the relationship map with the default relationship attributes.

This section has the following contents,
- Representation of Icons in the CI Type List Views
- Adding New CI Type
- Setting Attributes for CI Type
  - Using Drag and Drop Fields
  - Editing & Deleting Attributes
- Setting Default Relationship
  - Adding Relationships
  - Adding Relationship Attributes
  - Editing & Deleting Relationship
  - Viewing Relationship Map

**Representation of Icons in the CI Type List View**
- ![Create New CI](icon.png) Icon to create a new CI under a CI Type. Clicking on this icon directly takes you to the Add New CI form.
- ![View CIs](icon.png) Icon to view CIs under a CI Type
- ![Relationship Map](icon.png) Icon to view the relationship map for a CI Type. The relationship map holds the default relationships configured for the CI Type.

**Adding New CI Type**

To add New CI Type from the Configuration Item Types list view page,
1. Click **Add New CI Type** link. The Add New CI Type dialog pops-up.
2. Enter the **CI Type Name** under which the CIs should be classified. Say, Workstations, People, Department. This field is mandatory.
3. If the structure of the CI Type is granulated, then you need to further drill it into Sub Types. For instance, the CI Type - Workstation can be further drilled down into Sub Types like IBM Workstation, Unix Workstation and Windows Workstations. If the entered CI Type name is a sub type, then select the **Parent Type** from the drop down.
4. Enter a brief **Description** about the CI Type in the field provided.

5. Click **Save**. The page navigates to the **Edit Configuration Item Type** with the CI Type name, Parent Type and Description pre-populated with the specified values.

6. Choose an **Icon** to depict this CI Type in the list view. By default, an icon is uploaded for the CI Type. To upload a different icon, click **change** link. Select Choose File, to browse through the files and click **Import Image**.

   **Note:** The support formats to import images are jpg, gif and png.

4. The CIs populated or updated in the CMDB can also be tracked as assets in the asset database. For instance, the CIs under the CI Type Workstation, Server, Access Point, Keyboard and so on can be tracked as assets/components in the asset module. To track CIs under a CI Type as an IT or Non-IT assets/components in the Asset module, enable **Track as asset** check box. Select the **Category** and asset **Type** from the drop down.

   **Note:** If 'Track as asset' option is enabled for the parent type, then this option will not appear for its sub types.

Apart from adding CI Type from the Configuration Item Types list view page, the newly added **Product Types** with the **Type** field selected as "Asset or Components" are considered as CI Types.
Setting Attributes for CI Type

Attributes are data elements that describe the characteristics of the CI Type. Say, for instance, the attributes for the CI Type "Workstation" could include Model, Service Tag, IP Address, Processor Speed and so on.

From the Attributes tab, you can set two types of attributes namely, Default Attributes and Attributes Specific to CI Type. Default Attributes are common to all the CI Types, such as, Name, Site, Department and so on. To add a default attribute, click Edit button. [For adding default attributes, refer Using Drag and Drop Fields topic to know more on configuring the customizable fields].

CI Type Specific Attributes are attributes that provide more information on a particular CI Type. The attributes for the CI Type "Workstation" can be considered as the attributes specific to the CI Type. The attributes, both default attributes and CI Type specific attributes, are configured using the Drag and Drop fields.

Using Drag and Drop Fields

The Drag and Drop Field section consists of different customizable fields such as, Single line, Multi line, Pick List, Numeric and Date fields. Apart from these customized fields, System Attributes (entities configured in the Admin tab or data fetched during scan) can also be set as attributes for the CI Type.

Adding System Attributes

1. Drag the System Attribute field in the form. The System Attributes form opens.
2. Choose the system attributes from the drop down. You can label a different name in the **Label Name** field.

3. Click **Add**. The system attribute is added in the form.

4. Click **Save**.

**Adding Customizing field**

To add the other customized fields,

1. Drag and drop the field (Single line, Multi line, Pick list, Numeric or Date field) in the CI Type attribute form.

2. The **Add Attribute** form pops up where you need to enter the **Attribute Name** and **Description**. In the case of Pick list fields, enter the options to add to the list.

3. Click **Save**. The customizable field is added in the form.

**Note**

1. You cannot create a sub type for the CI Type - People. Instead you can create sub types for Requesters and Technicians.

2. The sub types inherit the Attributes and Relationships from the parent CI Type. Apart from this, attributes and relationships can also be configured for sub type.

3. Fields in the form can be re-arranged by dragging the field and placing it over a highlighted area.

**Editing CI Attributes**

To edit a customized attribute,

1. Click the **Edit** icon  beside the field to modify. The **Edit Attribute** form pops up with the values pre-filled while adding the attribute.

2. Modify the **Attribute Name** and **Description** field.

3. Click **Save**. The form is populated with the newly added changes.
Deleting CI Attributes

You can remove unwanted attributes from the CI Type form. To delete a customized attribute,

1. Click the **Delete** icon beside the field. A confirmation dialog appears
2. Click **Ok** to proceed. The field is removed from the form and is added to system attributes list.

**Warning**

Deleting a CI Type attribute will remove the attribute from the form. You may lose the data configured for the attribute in the CI form.

Setting Default Relationships

You can establish default relationships between the newly added CI Type and other CI Types from the Relationships tab. For instance, the relationship set for the CI Type Workstation can be,

<table>
<thead>
<tr>
<th>Workstation</th>
<th>Runs</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Newly added CI Type)</td>
<td>(Relationship Type)</td>
<td>(CI Type)</td>
</tr>
</tbody>
</table>

the inverse of this relationship type will be automatically added for Software CI Type,

<table>
<thead>
<tr>
<th>Software</th>
<th>Runs on</th>
<th>Workstation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(CI Type)</td>
<td>(Relationship Type)</td>
<td>(CI Type)</td>
</tr>
</tbody>
</table>

Setting default relationships provides feasibility while adding relationship between the CIs categorized under the CI Type. For a sub type, the parent CI Type relationships are adapted, apart from which new relationships can also be created. Using the **Relationship Map**, the relationship configured with other CI Types can be viewed from where the map can be exported or printed.

Adding Relationships

To establish a relationship between two CI Types,

1. Click **Relationships** tab in Edit Configuration Item Type form.
2. Click **Add** button. The Add Relationship form pops up.
3. Select the nature of the relationship between the CI Type and another CI Types from **Relationship Type** drop down.
4. Select the **CI Type** to which the relationship is established. Both the Relationship Type and CI Type are mandatory fields.
5. Click **Save**.

On defining the relationship with other CI Types, the attributes associated to the relationship can be set. The relationship attribute provides additional information on a relationship between the CI Types. For instance, the Installation path of the software in the workstation, the version installed, the date of installation and so on.

Adding Relationship Attributes

Relationship Attributes provides more information on the related CI Type. Say, for instance, if the CI Type is "Software", then you can add attributes such as Version of the software installed, the Installation path, Installed on, service pack details and so on.

1. Click **Add New Attribute** button.
2. Enter the **Attribute Name**. Say, Version Installed.
3. Select the **Field Type** from the drop-down. The field type can be either Single line, Multi line, Pick List, Numeric or date field.
4. If required, enter **Description** on the attribute in the field provided.
5. Click **Save**. The attribute is added to the relationship attribute list.

To delete a relationship attribute,

1. Enable the check box beside the Attribute Name in the Relationship form.
2. Click the **Delete** button. A confirmation dialog appears.
3. Click **Ok** to proceed. The relationship attribute is deleted from the list.

---

**Editing default Relationships**

To edit a CI Type relationship,

1. Click the **edit** icon beside the CI Type relationship to edit. The **Edit Relationship Type** form pops up pre-filled with values configured while adding the relationship.
2. **Modify** the Relationship Type and CI Type. Both the fields are mandatory.
3. Even while editing, you can add new relationship attributes or edit the existing relationship attributes by clicking on the **Attribute Name** link.
4. Click **Save**.

---

**Deleting default Relationships**

To delete a CI Type relationship,

1. Click the **delete** icon beside the CI Type relationship. A confirmation dialog appears.
2. Click **Ok** to proceed. The relationship is deleted from the CI Type relationship list.
Warning | Deleting a CI Type relationship will remove the relationship from the relationship map.

Relationship Map

The default relationships configured with other CI Types are viewed in the Relationship Map. Click Relationship Map icon to view the map.
Relationship Types

**Relationship Types** denotes the nature of relationship between a CI and another CI. The Relationship Type is expressed twice, one as **Relationship Type** and the other as **Inverse Relationship Type**. Some of the examples of relationship types are **Runs::Runs On**, **Sends data to::Receives data from**, **Located In::Houses** and so on.

Let's take a look at an example with the Relationship Type as **Runs::Runs On**. The relationship between a server and application is expressed as **Server1 Runs Application1**, while the relationship between the application and server is automatically expressed with the inverse relationship type, **Application1 Runs On Server1**.

To access the Relationship Type configuration wizard page,

1. Click **Admin** tab in the header pane.
2. Click **Relationship Type** icon under CMDB block. The Relationship Type List view page opens, displaying the default relationship types. From this page, you can add a new relationship type, edit an existing relationship type and perform bulk delete of relationship types.

**Adding New Relationship Type**

1. Click **Add New Relationship Type** link.
2. In the add new form, enter the **Relationship Type**, **Inverse Relationship Type** and a brief **Description** about the nature of the relationship type in the respective text fields.
3. Click **Save** to add the relationship type in the list view. To cancel the operation and return to the list view, click **Cancel**.

The relationship types shows how the CIs are interconnected and interdependent with other CIs. Using relationship types, CI Type relationships can be set from Admin -> CI Type and from the CI form. For establishing relationship using the Relationship Types, refer Relationships under CI Types.

**Editing Relationship Type**

1. You can edit the default relationship types as well as the newly added relationship types from the list view.
2. Click on a relationship type link. The **Edit Relationship type** form opens with the fields pre-filled with values already entered while adding a new relationship type.
3. Modify the fields values for Relationship Types, Inverse Relationship Type and Description.
4. Click **Save** to add the modified relationship type in the list view. To cancel the edit operation and return to the list view, click **Cancel**.

**Deleting Relationship Type**

To delete the newly added relationship types from the list view,

1. Enable the check box beside the Relationship type to delete.
2. Click the **Delete** button. A confirmation dialog appears.
3. Click **Ok** to proceed. The relationship type(s) are deleted from the list view.

**Note:** Please note that the pre-configured relationship types cannot be deleted.
Configuring Impact

Impact is a measure of criticality during an outage or a change in the CI, and is often measured by the number of people or systems affected. The impact caused due to the outage of a CI is defined while adding the CI. And also, while viewing the relationships of the CIs, the impact on other CIs, users and support groups can be identified.

To access the impact configuration wizard,

1. Click Admin tab in the header pane.
2. Click Impact icon under CMDB block. The Impact Details list opens where you can add new impact, edit and delete an existing impact.

Adding New Impact

1. Click Add New Impact link.
2. In the Add Details form, enter the Name of the impact and the details about the impact in the Description field.
3. Click Save to add the impact in the list view. Click Save and Add New to save the impact and add another impact. To cancel the operation and return to the list view, click Cancel.

Editing Impact

1. From the Impact Details List view page, click the edit icon beside the impact to edit.
2. The Update impact form appears with the fields pre-filled with the values entered while adding the impact.
3. Modify the field values for Impact Name and Description.
4. Click Save to add the modified impact in the list view. To cancel the operation and return to the list view, click Cancel. Click Save and Add New to save the modified impact and add another impact.

Deleting Impact

1. From the Impact Details List view page, enable the check box beside the impact name to delete.
2. Click the Delete button. A confirmation dialog appears.
3. Click Ok to proceed. The impact details is deleted from the list view.
Import CI(s) from CSV

If the CIs are recorded in a .csv file, then the same can be imported in AssetExplorer application using Import CI(s) from CSV. With the easy-to-use CSV import option, you can import the CIs information from your existing database as well as from other applications.

This section discusses the following contents,
- Accessing the CI Import Wizard
  - From Admin tab
  - From CMDB tab
- Steps to Import CIs from CSV

Accessing the CI Import Wizard

The CI Import Wizard can be accessed from either the Admin tab or the CMDB tab.

From Admin tab

1. Click the Admin tab in the header pane to open the configuration wizard page,

2. Click Import CI(s) From CSV icon under CMDB block.

From CMDB tab

1. Click the CMDB tab in the header pane. By default, the CIs under Business Service are displayed.

2. Click Import CIs link. The Import CIs link is available for all the CI Types.

Steps to Import CIs from CSV file

Step #1: Locate CSV file

1. Select the CI Type for which the CIs should be imported.
2. Click on Browse button to select the CSV file.
3. On locating the CSV file from the file chooser window, click Open. The path to the file appears automatically in Locate CSV file field.
4. Click on Submit.
The above image shows **CI Import Wizard** page and the CIs to be import are of the CI Type 'Workstation'.

**Step #2: Customize Mapping**

1. Select the **date format** in which all the date fields should represent.
2. Map the CI field with the field names from the CSV file. If there are any additional attributes configured, then the same appears in the customized mapping form.
3. Click **Import** button. The details of the CIs from CSV are imported.

4. On completion, the data on the total CIs, the number of CIs imported and the number of CIs failed to import are displayed.

**Warning**

If there are any failure records while importing the CIs, do not re-import the same .csv file. Instead, download the FailedCIsList.csv available in the Imported Result page, correct the errors and then import to avoid duplicate CIs.

**Notes**

**Note #1:**

If the CI Type chosen in Step #1 is a parent and if a CI row in the .csv file corresponds to sub CI Type, then the same can be mapped in the customize mapping form.

**Note #2:**

The sub CI Type specified in .csv file should already be entered while configuring the CI Types.

**Note #3:**

If existing CIs are imported again under a different CI Type, then the CIs are grouped under the new CI Type.
The **CMDB List view** page organizes and displays the CIs available under each CI Type configured in the application. In addition, the page includes other functionality such as,

- Option to view all the CIs available in the application
- Option to view the CIs under each CI Types
- Option to add CIs under a CI Type
- Option to modify the CI Type for CIs.
- Bulk delete of CIs from the list view.
- View Relationship Map
- Import CIs from CSV file
- Search CIs from the list view
- Customize columns to be displayed in the list view.

Click **CMDB** tab in the header pane. The page navigates to view the **Configuration Items** (CIs) under the CI Type Business Services. To view all the CIs in the CMDB irrespective of the CI Type, click **View All CIs** link. The CIs are listed with the Name, the CI Type and the Site to which they belong.
Viewing CIs under a CI Type

You can view CIs under a specific CI Type by selecting the CI Type from the **Configuration Items** block. Click the icon to view the Sub CI Type. To view the Sub CI Types of all the CI Types, click icon.

While viewing the CIs under a specific CI Type, the list view columns displays the **CI attributes** configured while adding the CI Type. Say, for instance, the CI Type 'Workstation' consists of attributes like Model, Service Tag, Service Pack and IP Address. So while viewing the CIs under CI Type Workstation, the configured attributes are listed in the list view column.

If you are viewing the list view column of a child CI Type, say 'Windows Workstation', the list view column would display the CI attributes configured for the parent CI Type as well as the attributes configured for the child CI Type.

If there are many attributes configured for a CI Type, then you can select the attributes to be displayed in the column list view using the column chooser icon.
Note
1. While viewing CIs under a parent CI Type, the CIs under its Sub CI Type are also listed.
2. The attributes in the column list view for Sub CI Type comprises of the parent CI Type attributes and the sub CI Type attribute.

An **Actions** drop-down button is visible in the list view for the CIs that are also tracked in the asset module, say, Keyboard, Access Points, Servers and so on. If you wish to track CIs under a specific CI Type in the asset module also, then enable **Track as asset** option while configuring the CI Type.

From the Actions drop-down, you can **modify a CI Type** for a CI. To do so,
1. Enable the check box beside the CI name.
2. Click **Actions** drop-down, select **Modify CI Type** option. The Modify CI Type dialog pops-up.
3. **Select the CI Type** from the drop-down.
4. Click **Save**.

**Importing CIs from CSV file**

If the CIs are recorded in a .csv file, then the same can be imported in the application from **Import CIs from CSV file** link. For importing Configuration Items from a CSV file, see Import CIs from CSV.

**Viewing Relationship Map**

Relationship Map gives a consolidated view of the relationship between the CIs. To view the relationship map of a CI, click **View Relationship Map** icon beside the CI. The Relationship Map opens in a new window.

**Adding CIs under a CI Type**

To add CIs under a CI Type,
1. Select the CI Type from the Configuration Items block.
2. Click **New** button and enter the CI details in the Add New form. The **Add New** form consists of the attributes configured while adding the CI Type. In case of **Sub CI Types**, the attributes configured while adding the Sub CI Type and the parent CI Type is displayed.

**Search CIs**

You can conduct an effective search operation using the **Search** field. To search for a specific CI using the search field,
1. Select the search parameter to **All CIs** from the **Search** field drop down.
2. Enter the keyword in the search field.
3. Click Go. The search results shows the list of CIs corresponding to the specified keyword. For instance, if "admin" is specified as the search string, then the search operation would result in CIs beginning with the word admin like administrator, administration, admin.

Deleting CIs from the List View

To delete CIs,

1. Select the CI Type under which the CIs should be deleted (OR) Click View All CIs to view all the CIs irrespective of the CI Type.
2. Enable the check box beside the CI to delete.
3. Click Delete button. A confirmation dialog appears.
4. Click OK to proceed. The selected CIs are deleted from the list.
   
   Note: In delete operation, the related financial and history details of the CI is deleted.
Defining CI Relationships

CI Relationships form a major part of your CMDB, as it is the relationships between the CIs that differentiate the CMDB from the asset database. A CMDB without relationships constitutes a bunch of CIs in a single database, fetched through scan or import process, or by manual addition. But with relationships, the users accessing CMDB can understand the interdependencies between the CIs, and in the case of a failure, the impact caused on another CI can be identified.

NOTE: To make your CMDB structure less complex, consider the relationships you will require in your CMDB and ensure to use the right relationship type to define the nature of relationship.

This section covers the following topics,

1. Defining Relationships
2. Accessing Relationship Map
3. Viewing the Relationship Map
4. Adding Relationships from the Map
5. Deleting a Relationship from the Map

Defining Relationships

In order to define the CI relationships in your CMDB, three piece of information is required.
1. The CI for which the relationship is created
2. The Type of Relationship denoting the interdependencies between the CIs, and
3. The dependent CI.

Say, for instance, consider a sentence like "AssetExplorerServer Depends on CentOS2Server". Here, AssetExplorerServer is the CI for which the relationship is created, Depends on denotes the nature of relationship, and CentOS2Server forms the dependent CI.

Accessing the Relationship Tab

Every CI in ManageEngine AssetExplorer is represented with Attributes and Relationship. While the Attributes are data elements describing the CIs, the relationships help in understanding the interdependencies between the CIs. The relationships can be defined from the relationship tab.

To access the Relationships tab,
1. Click CMBD tab in the header pane.
2. Select the CI Type from the Configuration Items block. Say, Workstation. Else, select All CIs link to view all the CIs irrespective of the CI Type.
3. Select the CI Name link to view the CI details.
4. From the CI details page, click Relationships sub-tab.

Viewing relationships from the Relationship tab

The relationship between the CIs are viewed in the Relationship tab. From the Relationship tab, you can

- View the Relationships in Map View and List View
- Access the full screen of the Relationship Map
- Zoom in and Zoom out the relationships linked in the map
- Add Relationships
By default, the relationship editor is shown in Map View. Click List View link, to view the CIs grouped according to the Relationship Type. To access the full screen view of the relationships, click relationship map icon.

![Relationship Map Icon](image)

Use the Zoom in and Zoom out icon to view particular magnifying levels of the CI relationship. Click Reset icon to reset the relationship map to the default view instantly.

![Zoom Icons](image)

Adding Relationships from the Relationship tab

ZOHO Corp.
To add relationships from the relationship tabs,

1. Click **Add relationship** button. The Add relationship window pops up.

2. The default relationships configured for the CI Type "Server" is listed in the **Choose Relationship** drop-down. Select the relationship from the drop-down, say, "Runs - Software". The CIs under the CI Type "Software" are listed along with the configured relationship attributes.

3. If you would like to create relationships with other CIs, enable **Search other CIs to Create Relationships** radio button.

4. By default, the CIs available in the CMDB are listed in the Available CI(s) column. If the CI list is excessive in length, then you can conduct a search for the CI by entering the search string. Click **Search** button. The search result is displayed in the Available CI(s) column. You can also view CIs under a specific CI Type. Select the **CI Type** from the drop-down, say, Department. The CIs available for the CI Type Department are listed under **Available CI(s)** column. You can also conduct a search operation if the CI list under a CI Type is excessive in length. Say, for the CI Type Department, the entered search string is "Finance". On clicking **Search** button, "Finance" appears in the Available CI(s) column.
5. Select the CI(s) from the Available CI(s) column. Click **Move Right >>** button to move the selected CI(s) to the **Selected CI(s)** column.

6. Select the nature of relationship between the CIs from **Choose Relationship Type** drop down.

7. Click **Add**. The relationship is added in the relationship map.

**Deleting a relationship**

To delete a relationship from the relationship map,

1. Click **List View** link. The relationship between the CIs are listed according to the relationship type.

2. Enable the check box beside the CI to delete. If you wish to delete all the CIs under a specific relationship type, click **Select All** button.

3. Click **Delete** button. The selected CIs are deleted from the relationship map.

**Note:** Please note that you cannot delete a relationship from the Relationship Map.
Relationship Map

**Relationship Map** is uniquely designed to provide the ability to understand the dependencies between the CIs. The relationships between the CIs are discovered automatically while populating the CIs into the CMDB by Importing Users from Active Directory or from LDAP, performing a Windows Domain Scan or a Network Scan. If your CIs are recorded in a CSV file, then Importing CIs from CSV is an appropriate option. You can also manually add relationships between the CIs from the Relationship Map.

Using the Relationship Map, you can analyze the impact caused by the CI on a business service, and identify the root cause of the impact, thus establishing appropriate measures to gradually eliminate the perpetual issues faced by your organization.

This section has the following contents,

- Accessing the Relationship Map
  - From CI List View
  - From CI Details Page
- Using the Relationship Maps
  - Quick Create - Relationship
  - Viewing Relationship Attributes
  - Viewing CI Details
  - Adding Relationships

**Accessing the Relationship Map**

In ManageEngine AssetExplorer, all the CIs are represented with a **Relationship Map** icon to have a quick view of the relationships between the CIs. You can find this relationship map icon in the CI List View and in the CI details page.

**From CI List View**

1. Click **CMDB** tab in the header pane.
2. Select the CI Type from the Configuration Items block to view the list of CIs. Else, select **All CIs** link to view all the CIs irrespective of the CI Type.
3. To launch the relationship map in a new window, click the **Relationship Map** icon beside the CI in the CI List View.

**From CI Details page**

1. Click **CMDB** tab in the header pane.
2. Select the CI Type from the Configuration Items block. Else, select **All CIs** link to view all the CIs irrespective of the CI Type.

3. Click the CI Name link to view the CI details.

4. In the CI details page, click the Relationship Map icon to launch the Relationship Map in a new window.

Using the Relationship Map

From the Relationship Map, you can perform the following operations;

- Create relationships instantly using the **Quick Create Relationship** option
- View **Relationship attributes** configured for the CIs
- View CI details of the CIs
- Add Relationships between the CIs.

Quick Create - Relationship

The Quick Create - Relationship is an instant means to create relationships between the CIs. You can create relationships for the existing CIs in the relationship map or create dependencies between other
CIs using this option.

In order to create a relationship using the Quick Create - Relationship option, three piece of information is required.

1. The CI for which the relationship is created.
2. The Relationship Type, denoting the interdependencies between the CIs.
3. The dependent CI.

Say for example, enter a sentence like `AssetExplorerServer Depends on CentOS2Server`. Here, `AssetExplorerServer` forms the first piece of information, `Depends on` is the relationship type and `CentOS2Server` forms the dependent CI.

If the CI name has a space in between, specify the name in double quotes like, "ManageEngine AssetExplorerServer" Depends on CentOS2Server.

**Note**

To denote installed softwares, use the relationship "Runs::Runs on".

To create relationships using the Quick Create - Relationship option,

1. Select the Quick - Create Relationship button in the Relationship Map. The Quick - Create Relationship dialog pops-up.
2. Enter a sentence with the CIs and the relationship type. Example, AssetExplorerServer Depends on CentOS2Server.
3. Click Add. The CI dependencies are added in the Relationship Map.

For dependencies added between two CIs that are not present in the Relationship Map, select Click here to view map link to view the relationship map between those CIs.
In case of conflict between CIs with similar CI names, such as "Administration" and "Administrator", the Quick Create - Relationship option provides the list of CIs, from where, you can choose the appropriate CI. To ease your selection process, choose the CI Type from the drop-down.

You can also create relationships between CIs that are unavailable in your CMDB. Say, for instance, if Administrator is unavailable in your CMDB, then you can add Administrator as a new CI by selecting the CI Type from the drop-down. Click OK to view the CI in the relationship map.

**Viewing Relationship Attributes**

Relationship Attributes provide additional information on the relationship between the CIs. Say, for instance, if a server runs a software application, then details such as the Installation Path, Version, Installed On and so on can be configured as relationship attributes.

The Relationship Attributes are configured while setting the default Relationships for a CI Type. To view these relationship attributes on the relationship map, move the mouse pointer over the CI.
Note: The Relationship Attributes can be viewed only if the attributes are configured for the relationship.

Viewing CI Details

While viewing the Relationship Map, you can also view the details of a CI. To view the CI details,
1. Move the mouse pointer over the CI.
2. Click View CI details button. The CI details pops-up.

Add Relationship

To add relationships from the relationship map, click Add Relationship button. The Add relationship window pops up. Adding relationships from the relationship map is similar to the method discussed in Adding Relationships from the Relationship tab.
Purchase Order

Purchase Order Configurations

You need to configure the purchase configurations before creating a Purchase Order.

The Purchase Configurations are,

- **Cost Center** The Business Units are budgeted and tracked for the cost, income and allocation.

- **GL Code** Add General Ledger Codes that can be associated with the Purchase Order.

- **Purchase - Additional Fields** Require Additional Fields while creating a Purchase Order? This configuration provides option to add text, numeric and date/time fields.

- **Purchase Default Values** Set default values to be populated in the New Purchase Order form.
Cost Center

Individual department or a group of department makes a Cost Center. These cost centers are budgeted and tracked for the cost, income and allocation. These cost centers will be associated with the purchase order while making a new purchase in your organization.

To access the Cost Center configuration,

1. Click Admin tab in the header pane.
2. Click Cost Center icon under the Purchase block. The Cost Center list view page opens where you can add, edit and delete a cost center.

Add Cost Center

1. Click New Cost Center link. The Cost Center form has four mandatory fields namely, Cost Center Code, Name and Owner.
2. Specify the code for the cost center in Cost Center Code field.
3. Specify the Name of the cost center.
4. The departments configured in AssetExplorer application is listed under Departments. Select the Department from the available list.
5. Specify the Owner of the cost center. The owner is generally the department head and employee of the organization.
6. If required, enter relevant information about the cost center in the Description field.
7. Click Add Cost Center button. The cost center is added to the List View.

Edit Cost Center

1. Click the Edit icon beside the cost center you wish to modify. The details while adding the cost center is populated in the edit form.
2. Modify the required details in the fields.
3. Click Update Cost Center button.

Delete Cost Center

1. Click the Delete icon beside the cost center to be deleted. A confirmation dialog appears.
2. Click Ok to proceed. The cost center is deleted from the list.
GL Code

You can add all the General Ledger Codes using this option. A general ledger account has a specific code for all transactions in the organization. On specifying the GL code you will be able to track the necessary information for a specific transaction.

Say, If you want to know all your company's IT purchases for the November month 2007, then you can specify the GL code for IT purchases in November 2007 and get the details.

To access the GL Code configuration,

1. Click Admin tab in the header pane.
2. Click GL Code icon under Purchase block. The GL Code list view page opens where you can add, edit and delete a GL Code.

Add GL Code

1. Click New GL Code link. The GL Code form has two fields namely, GL Code and Description.
2. Enter the GL Code. This field is mandatory.
3. Specify any relevant information about the GL Code in the Description field.
4. Click the Add GL Code button. The GL Code is added to the List View.

Edit GL Code

1. Click the Edit icon beside the GL Code you wish to modify. The details while adding the GL Code is populated in the edit form.
2. Modify the required details in the fields.
3. Click Update GL Code button.

Delete GL Code

1. Click the Delete icon beside the cost center to be deleted. A confirmation dialog appears.
2. Click Ok to proceed. The cost center is deleted from the list.
Purchase Additional Fields

If you require any further additional information while adding a new purchase order apart from the pre-set fields in the new PO form then you can configure them under Purchase-Additional Fields. You can add **Text** fields, **Numeric** fields, **Date/Time** fields and **Cost** fields in the form.

To add Purchase Additional Fields,

1. Click **Admin** tab in the header pane to open the Configuration Wizard page.
2. Click **Purchase- Additional Fields** icon under the Purchase block. The Purchase Additional Fields page opens where you can add up to 12 text and cost fields, four numeric and date/time fields.

Configuring Additional Text fields

1. By default, the **Text** sub-tab is selected. Specify the **Label** for the Additional field.
2. Specify any relevant information about the additional field in the **Description** text field.
3. Select the **Type** of the text field by enabling the radio button. It can be either **Single-Line**, **Multi-Line** or **Pick List (drop down list)**.
4. You can also specify default values to be pre-filled in the new purchase order form.
5. **Save** the settings.

Configuring Additional Numeric fields

1. Click **Numeric** sub-tab.
2. Specify the **Label** for the additional field.
3. Specify any relevant information about the additional fields in the **Description** field.
4. **Save** the settings.

Configuring Additional Date/Time fields.

1. Click **Date/Time** sub-tab.
2. Specify the **Label** for the additional field.
3. Specify any relevant information about the additional fields in the **Description** fields.
4. **Click Save**.

Configuring Cost fields

1. Click **Cost** sub-tab.
2. Specify the **Label** name for the additional field
3. Specify any relevant information about the additional fields in the **Description** field.
4. You have two cost type fields, **Add cost** (for cost addition) and **Subtract cost** (for cost subtraction). Click the corresponding radio button to select the cost fields.
5. If you wish to add any default values for these fields, you can enter the same in the text box provided for the same.
6. **Click Save** to save the settings.
Purchase Default Values

With this option, you can set the default values to be populated in the New Purchase Order form. You can set default values for fields such as tax rate, the billing and shipping address, the purchase order terms and conditions and so on. Thereby, making it feasible to add create a Purchase Order instantly.

To access the purchase default value configuration page,

1. Click **Admin** tab in the header pane.
2. Click **Purchase Default Values** icon under **Purchase** block.

Configuring Purchase Default Values

- **Default Currency:** The default currency to be displayed in all the purchase orders (PO) generated and in places where money is being used. Say, USD, $
- **Default Tax Rate (%):** Tax rate used for calculating the sales tax in all the POs generated. You can provide different tax rate to a specific PO by entering the new rate while creating the PO.
- **Signing Authority:** Signing Authority's name.
- **Tax Shipping:** Enable the check box for additional tax in shipping of the items.
- **Shipping Address:** Select the default Site to which the PO items needs to be shipped.
- **Billing Address:** Select the default Site for invoice and billing the PO items.
- **Cost Center:** Default cost center department to be displayed.
- **Approver (s):** Approvers for the purchase order. The approvers can be the users or technicians in your organization.
- **PO Owner as Approver:** Enable the check box if you wish to add the PO owner as the approver.
- **Multi Approval:** If there are more then one approvers, on enabling multi approval check box, the PO is approved only if all the approvers approve the PO. The PO is rejected even if one of the approvers rejects the PO.
- **Terms and Remarks:** Terms and remarks while making the purchase.
- **PO# Start From:** Customize the PO number.

Click **Save**.
Viewing PO based on filters

You can view PO based on pre-defined filters from the purchase order list view page. This helps in sorting and viewing purchase order based on your requirement. The pre-defined filters in AssetExplorer are,

- **All POs** Lists all the purchase orders irrespective of the status.
- **Open POs** Lists all the POs raised and yet to send it for approval.
- **POs Pending Approval** POs which are pending and awaiting for approval from the higher authority.
- **Approved POs** Lists all the approved Purchase Orders.
- **Rejected POs** Lists all the unaccepted Purchase Orders.
- **Partially Received POs** Lists the POs for which the items are partly received from the vendor.
- **Closed POs** Lists the POs for which the items are received and the invoice and payment is done.
- **Overdue POs** Lists all the POs that has exceeded the delivery date.
- **Ordered POs** Lists all the POs for which the items have been ordered by the vendor.
- **Received POs** Lists the POs for which the items has been completely received.
- **Payment Done POs** Lists all the POs for which the payment is done.
- **Invoice Received POs** Lists all the POs for which the invoice is received from the vendor.
- **POs due in next 7 days** Lists the POs expiring in next 7 days.
- **POs due in next 30 days** Lists the POs expiring in next 30 days.
Creating a Purchase Order

There are two ways in which you can access the Purchase Order form.

- Create New Tab
- Purchase Tab

Create New Tab

The Create New Tab is a quick navigator to instantly access the New Purchase Order form.

To create a purchase order, go to Step 3 in Purchase Tab.

Purchase Tab

1. Click Purchase tab in the header pane to open the Purchase Order list view page.
2. Click New Purchase Order button.
3. In the New PO form, the status of the Purchase Order is New PO by default.
4. Enter the Order No of the purchase order say, P.O #2268 and the PO name say, purchase of laptops in the specific fields. Both fields are mandatory.
5. Select the Required by date of the items from the calendar icon.
6. Select the Vendor Name from the drop down. If the specified vendor name is not available in the list, click Add New icon and specify the vendor details such as Name, Contact Information and Contact Person of the vendor. Save the details.
7. If you have specified the Purchase Default Values to be displayed in the new PO form, then the same are populated in the form.
8. If you have not configured the default values for shipping and billing address, select the Shipping and Billing Address from the drop down. You can also add the shipping and billing address by clicking the Add New icon.
9. The **Product Type** and **Products** drop down lists the products associated with the selected vendor. Select the Product Type and the corresponding Products. The items are listed one below the other along with the price details. You can also add new product by invoking the **Add** icon. Specify the **Product Name**, **Product Type**, **Part No** and **Price** of the item. Save the details.

10. Specify the **Price** (if it is not mentioned), **Tax Rate ($)** and the **Quantity** of items to be ordered.

11. In addition, you can specify **Discounts**, **Shipping Cost**, **Sales Tax Rate (%)** and **Additional Tax Rate (%)** which is considered while calculating the total amount of the PO.

```
<table>
<thead>
<tr>
<th>S.No</th>
<th>Items</th>
<th>Part No</th>
<th>Price ($)</th>
<th>Tax Rate ($)</th>
<th>Quantity</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Copper Wire</td>
<td>2848</td>
<td>10.00</td>
<td>12.50</td>
<td>10</td>
<td>112.50</td>
</tr>
<tr>
<td>2</td>
<td>electrical wires</td>
<td>3245</td>
<td>10.00</td>
<td>12.50</td>
<td>10</td>
<td>112.50</td>
</tr>
</tbody>
</table>
```

Sub Total($) 225.00

- Discount (%) 0 0.00
- Total (Net)($) 225.00
+ Shipping Cost ($) 0.00
+ Sales Tax Rate (%) 0.00
+ Additional Tax Rate (%) 0.00
-/- Price Adjustment ($) 0.00

TOTAL($) 225.00

12. Under General Information block, the Created Date by default is the day when the PO is created. You cannot edit this field.

13. Similarly, the logged in technician is displayed as the **Owner** of the PO.

14. By default, the **Requested By** is the technician creating the PO.

15. Select the **Cost Center** and the **GL Code** from the drop down.

16. Enter any related comment of the PO in the **Remarks** field. Say, if the PO# name is PO XE-SC-4, where XE-SC-4 stands for Xerox-Scanner. In this case, explain about the XE-SC-4 in the remarks field.

17. Also specify the terms and conditions of the purchase in the **Terms** field.

18. If you would like to attach a file then click **Attach file** button.

19. Select the Approvers of the purchase order from the **PO Approver (s) list** pop window by clicking the icon.

20. Enter the **Signing Authority** of the company in the respective field.

21. Click **Save the Purchase Order** button. On saving the PO, the status changes to **Open**.
Purchase Order Approval Process

Once the Purchase Order is created, the PO should be Submitted for Approval by the concern technician. The approval process is initiated by sending a request for approval to the concerned authority and depending on their decision the PO is approved or rejected.

- The technician approving the purchase order should be assigned with the Purchase Order Approver role.
- While creating a purchase order the approver should be selected from the approver's list to send for approval.
- If the approver is not selected or if there are no approver in the list, a warning message appears while submitting the PO for approval.
- Once the request is submitted for approval the status of the PO changes to PO Pending Approval.

Submitting the PO for Approval

1. Click Purchase tab in the header pane to open the PO List View page.
2. Select Open POs to be submitted for approval using the Filter drop down. Click the PO name link.
3. From the PO details page, click Actions tab -> Submit for Approval option. The Submit for Approval dialog pops up.
4. Enable Send Mail Notification check box, if you wish to send a mail to the approver regarding the PO Approval.
5. The To field is pre populated with the email address of the approvers. If required, you can modify the subject content manually.
6. Type in the message text for mail notification in the Description field.
7. Click Send. The mail notification is sent to the user addressed in the To field of the notification.
Approving/Rejecting the PO

Once the PO is submitted for approval, a mail is sent to the user addressed in the To field. The email contains the link to the PO requiring approval. Clicking the link displays the PO awaiting approval. The user can also approve/reject the PO directly from the application.

Approve/Reject PO from the application

If you have the permission to approve/reject a Purchase Order,

1. Login to the AssetExplorer application with your login credentials.
2. Click Purchase tab in the header pane.
3. Select the POs Pending for Approval using the Filter drop down. Click the PO name link.
4. From the PO details page, click Actions tab -> Approve/Reject option. You can send an email notification to the PO owner regarding your decision.

The approved Purchase Order is grouped under the status Approved POs while all the rejected Purchase Orders is grouped under Rejected POs status. The Rejected POs can be deleted completely from the system or can be edited and sent for approval again.
Ordered Purchase Order

Once the Purchase Order is approved by the concern personnel, you need to order the items from the vendor.

1. Click **Purchase** tab in the header pane to open the PO List View page.
2. Select Approved POs from the **Filter** drop down. Click the **PO name** link.
3. From the PO details page, click **Actions** tab -> **Order this PO** option. The Order this PO dialog pops up.

4. Enable **Send Mail Notification** check box, if you wish to send a mail to the vendor regarding ordering of items.
5. Enter the Email address of the Vendor in the To field. You also have an option to CC this mail.
6. If required, you can modify the **Subject** content manually and type in the message text for mail notification in the **Description** field.
7. Click **Attach file** button to attach relevant files to the Order.
8. Click **Send**.
Receiving Purchase Order Items

The Approved PO is sent to the vendor to receive the ordered items. The vendor can dispatch the items either completely or partially, providing a receipt in both cases.

AssetExplorer has the ability to change the status of the PO accordingly, i.e., when the items are received partially, the PO Status is automatically changed to Partially Received and on receiving all the items, the PO Status changes to Items Received.

Receiving Items

To mark partially or completely receive items,

1. Click Purchase tab in the header pane to open the PO List View page.
2. Select Ordered POs from the Filter drop down. Click the PO name link.
3. Enable the check box beside each of the received items. If only a part of the ordered items are delivered, enter the Quantity that have been received.
4. Click Receive items button. The PO form is updated with the Received Quantity value and the status is moved to Partially Received POs.
5. All the received items is added as assets automatically, except for the items with Product Type as Consumable. [Refer Product Type]
Associating Assets

To associate assets,

1. From the Purchase Order details page, click on **Actions** tab -> **Associated Assets** option. All the received assets for the PO is displayed.

2. Enable the check box beside the asset to associate the asset to a group. Click **Actions** drop down -> **Add to Group**. The **Add Resource(s) to** dialog pops up.

3. Select the group from the existing list of groups or enable the radio button beside **New Group**, to add a new group. The asset gets associated to the corresponding group.
Reconcile Workstations

Once the workstations are received from Purchase Order, the assets are associated to Department or Groups. On performing a domain scan or network scan, the associated workstations are duplicated.

Say, "LD400 - PO # 2[10]" is the workstation purchased and has been renamed as "AE-dept". On performing a scan, both the workstations appear in the List View. To avoid this you can reconcile the assets from either the PO details page or from the asset list view page.

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Items with the Product Type as Consumables are not added to the assets and hence cannot be reconciled.</td>
</tr>
<tr>
<td>2. The scanned workstations can be reconciled only once.</td>
</tr>
<tr>
<td>3. You cannot reconcile workstations from the same purchase order.</td>
</tr>
</tbody>
</table>

To reconcile assets from the purchase order details page,

1. Click Purchase tab in the header pane to open the Purchase Order list view page.
2. Click the PO# name link of the purchase order for which the items needs to be reconciled. You can also use the Filter drop down to sort and select the PO.
3. From the purchase order details page, click Actions -> Reconcile option. The Reconcile Workstation(s)/Server(s) pops up.

4. Enable the check box beside the resource name and enter the Service Tag of the scanned workstation.
5. Click Reconcile button. The data in the purchased workstation is copied to the scanned workstation copied. On reconciling, the purchased workstation is deleted.
Adding Invoice details and Notification

Once the PO is approved by the concern personnel, the Invoice and Payment options gets populated in the Actions tab. On receiving the Invoice from the Vendor, you can add the Invoice details and also sent a notification to the concern technicians.

Add Invoice

1. Click Purchase tab in the header pane to open the purchase list view page.
2. Click the PO Name link of the Purchase Order to add an Invoice.
3. From the PO details page, click Actions drop down -> Add Invoice option. The Add Invoice dialog pops up.

4. Enter the Invoice ID. This field is mandatory.
5. Select the Receive Date and the Payment Due Date from the calender icon.
6. If required, enter the relevant comments from regarding the Invoice in the Comments field.
7. You can also enable payment notification to the technicians by enabling the check box.
8. Select the technicians from the list for payment notification. Click >> button.
9. Enter the Days before which the notification should be sent to the selected technicians.
10. Click Save.
Receive Invoice

Once the Invoice is received from the Vendor, you can notify the same to the PO approvers.

1. Click **Actions** drop down -> **Receive Invoice** option. The Receive Invoice dialog pops up.
2. Enable **Send Mail Notification** check box.
3. Enter the email address in the **To** field.
4. If required, you can modify the **Subject** content manually and type in the message text for mail notification in the **Description** field.
5. Click **Send**. The status of the PO changes to **Invoice Received**.
Adding Payment details & Notifications

Once you receive the Invoice from the Vendor, you can proceed with the payment process and notify the approvers done the payment is done.

Adding Payment Details

1. Click Purchase tab in the header pane to open the purchase list view page.
2. Click the PO Name link of the Purchase Order to add an Invoice.
3. From the PO details page, click Actions drop down -> Add Payment option. The Add Payment details dialog pops up.

4. Enter the Pay Amount ($). This field is mandatory.
5. Select the Date of Payment from the calendar icon.
6. If required, enter relevant comments in the Comments field.
7. You can also enable notification if there are any dues in the payment by enabling the check box.
8. Select the Payment Due Date from the calendar icon.
9. Select the technicians from the list for payment notification. Click >> button.
10. Enter the **Days** before which the notification should be sent to the selected technicians.
11. Click **Save**.

**Payment Done**

Once the payment is done, you can notify the same to the PO approvers.

1. Click **Actions** drop down -> **Payment Done** option. The Payment Done dialog pops up.
2. Enable **Send Mail Notification** check box.
3. Enter the email address in the **To** field.
4. If required, you can modify the **Subject** content manually and type in the message text for mail notification in the **Description** field.
5. Click **Send**. The status of the PO changes to **Payment Done**.
E-mailing the PO Owner

By default, the logged in technician creating the Purchase Order is the PO owner. You can send email notifications to the owner regarding the progress of the Purchase Order using this option.

To send an Email to the owner,

1. Click Purchase tab in the header pane to open the Purchase Order List View page.
2. Click the PO # name link. You can use the Filter drop down to sort and select the Purchase orders.
3. From the Purchase Order details page, click Actions tab -> E-mail the Owner option. A Send E-mail notification window opens with the owner's email ID in the To field. The subject reads as "Notification for Purchase Order" with the notification number. Say, Notification for Purchase Order # 1.
4. To notify the contents of the email to any other person other than the owner, specify the Email ID in the Cc field.
5. To attach any file to the mail, select Attach file link.
   1. Click Browse button to choose a file.
   2. Select the file and click Attach file button to attach the files. You can see the file attached with the file size. Note: Files up to the file size of 10 MB can be attached.
6. Enter the email content in the Description area.
7. Click Send button to send the mail. This displays a message showing that the Notification has been sent successfully.
8. Close the window.
E-mailing the Vendor

Once the purchase items are ordered from the vendor, you can send email notifications to the vendor regarding the progress of the items received i.e., if the organization has received the items partially or completely.

To Email the vendor,

1. Click **Purchase** tab in the header pane to open the purchase order list view page.
2. Click the **PO # Name** link. You can use the **Filter** drop down to sort and select the PO.
3. From the purchase order details page, click the **Actions** tab -> select **Email the Vendor** option. The **Send E-mail** notification window opens.
4. Enter the vendor address in the **To** field. You can also notify the contents of the email to more than one person by entering their email address in the **CC** field.
5. By default, the **Subject** reads as "Notification for Purchase Order" with the notification number. Say, Notification for Purchase Order # 1.
6. Enter the email content in the **Description** area.
7. To attach any attachment to the mail select **Attach file** link.
   1. Click **Browse** button to choose a file.
   2. Select the file and click **Attach file** button. You can see the file attached with the file size.
      **Note:** Files up to the file size of 10 MB can be attached.
6. Click **Send** button to send the mail. This displays a message showing that the Notification has been sent successfully.
7. Close the window.
Editing Purchase Order

ManageEngine AssetExplorer provides an option to modify the created Purchase Order.

1. From the PO List View page, select the **PO# Name** link to view the PO details page.
2. Click **Actions** tab -> **Edit Purchase Order** option. The PO form opens in an editable form with the values populated while creating the Purchase Order.
3. Modify the details and **Save** the changes.
Printing Purchase Order

You can preview and print the entire Purchase Order details using Print Preview option.

To print a Purchase Order,

1. Click Purchases tab in the header pane to open the purchase list view page.
2. Click the PO # Name link of the purchase order you wish to print. You can use the Filter drop down to sort and select the PO.
3. From the Purchase Order details page, click Actions tab -> Print Preview option. The Purchase Order details is displayed in a printable format.
4. Click Print option or Ctrl +p to print the Purchase Order details.
5. Set the required options and click Ok.
Deleting Purchase Orders

You can delete a Purchase Order either from the List View or from the PO details page.

Deleting PO from List View

Delete bulk Purchase Orders using this option.

1. Enable the check box beside the Purchase Order to delete. You may use the Filter drop down to sort and select the PO to delete.
2. Click Delete button. A confirmation message appears.
3. Click Ok to proceed. The PO is deleted from the list.

Deleting PO from details page

Individual Purchase Order can be deleted using this option,

1. Select the PO Name link of the Purchase Order to delete. You may also use the Filter drop down to sort and select the PO to delete.
2. From the PO details page, click Actions tab -> Delete Purchase Order option.
3. A confirmation message appears. Click Ok to proceed. The PO is deleted from the list.
Closing a PO

ManageEngine AssetExplorer provides an option to Close a PO manually on receiving all the items and the invoice, or after making the payment.

To close a Purchase Order,

1. Click **Purchase** tab in the header pane to open the purchase list view page.
2. Click the **PO Name** link of the Purchase Order to close. You can use the Filter drop down to sort and select the PO.
3. From the PO details page, click **Actions** drop down -> **Close PO** option. The Close PO dialog pops up.
4. Enable **Send Mail Notification** check box.
5. By default, the email address of the technician is displayed in the **To** field.
6. If required, you can modify the **Subject** content manually and type in the message text for mail notification in the **Description** field.
7. Click **Send** button. The status of the purchase order is changed to Closed.
Contracts

Contracts are services provided to a resource for a definite time period. The assets purchased can be associated to more than one contract with different times for renewal. If the contracts are not renewed on time, enterprise end up paying huge penalties.

With Contract module in AssetExplorer, you can manage multiple contracts associated with your assets such as printers, scanners, workstations, routers, and even your air conditioning systems. Also, you can not only track the contract renewal time but provide an option to notify the asset manager before a contract expires to avoid penalties.
Contracts - Additional Fields

If you require any further additional information while entering the contract details apart from the pre-set fields, you can configure them under Contract - Additional Fields. You can add text fields, numeric fields and date type fields in the form.

To add additional fields,

1. Click the Admin tab in the header pane to open the configuration wizard page.

2. Click Contract - Additional Field icon under Contracts block. The Contract - Additional Fields page opens where you can add up to 12 text fields, four numeric and date/time fields.

Configuring Additional Text fields

1. By default, the Text tab is selected. Specify the Label for the Additional field.
2. Specify any relevant information about the additional field in the Description text field.
3. Select the Type of the text field by enabling the radio button. It can be either Single-Line, Multi-Line or Pick List (drop down list).
4. You can also specify default values to be pre-filled in the contracts form.
5. Save the settings.

Configuring Additional Numeric fields

1. Click the Numeric tab.
2. Specify the Label for the additional field.
3. Specify any relevant information about the additional fields in the Description text field.
4. Save the settings.

Configuring Additional Date/Time fields

1. Click the Date/Time tab.
2. Specify the Label for the additional field.
3. Specify any relevant information about the additional fields in the Description text field.
4. Click Save to save the setting.
Custom Contract Notification Template

Contract Expiry Notification is a notification sent by email to the user before a contract is about to expire. The message content in the contract notification can be customized to suit your needs.

To access the contract - customize notification template,

1. Click the **Admin** tab in the header pane to open the configuration list view page.
2. Click **Custom Contract Notification Template** icon under **Contracts** block.

Contract Expiry Notification Template

The page opens to display the Subject and Message contents for contract expiry notification. You can compose the mail by selecting the variables from the pick list beside the Subject and Message block.

Click on the variable to add it to the message content.

The variable is replaced with the corresponding value while sending the email. Say, the variable $ContractID is replaced with the Contract ID of the contract which is about to expire.

Click **Save** to save the details.
Contracts List View

The contract list view page displays all the active and expired contract configured in AssetExplorer application. The page includes various useful functionality such as,

- option to view contracts based on pre-filters
- customize columns to be displayed in the list view
- set the number of contracts to be displayed per page
- search for contracts using search string

Clicking on the Contracts tab re-directs the page to the contract list view page.

Representation of Icons in the Contract List View,

- column-wise search option to search for contracts based on contract name, support plan and so on.
- select the columns to be displayed in the list view.

From the Contract List View page you can,

1. **Set the number of Contracts per page and navigation buttons**: You can set the number of contracts to be displayed in the contract list view page.
2. **Recent Items**: All the recent items viewed by you is displayed under this block. You can navigate back to those pages on clicking on the item link.

![Recent Items](image)

3. **Request based on filters**: View specific group of contracts through pre defined filters. [Refer Contracts based on filters]

4. **New Contract**: Create New Contract for an account/product. [Refer Adding New Contract]

5. **Delete**: Bulk Delete of contracts.
Contracts Based on Filters

You can view Contracts based on pre-defined filters from the contracts list view page. This helps in sorting and viewing contracts based on your requirement. The pre-defined filters in AssetExplorer are,

- **Open Contracts** Lists all the contracts which are active and yet to get expired.
- **All Expired Contracts** Lists all the contracts which are expired.
- **Contracts expired in last 30 days** Lists all the contracts which expired in the last 30 days.
- **Contracts expiring in next 7 days** Lists all the contracts which will be expiring in next 7 days.
- **Contracts expiring in next 30 days** Lists all the contracts which will be expiring in next 30 days.
Creating New Contracts

Contracts are services provided to a product for a definite time period. The assets purchased can be associated to more than one contract with different times for renewal.

The new contract form can be accessed by two ways in AssetExplorer application.

a. Create New Tab
b. Contracts tab

Create New Tab

The Create New Tab is a quick navigator to instantly access the New Contract form the home page.

To create a contracts, go to Step 3 in Contracts Tab.

Contracts Tab

1. Click Contracts tab in the header pane to open the Contracts list view page.
2. Click New Contract button.
3. From the Add Contract form, specify the Contract Name in the given field. This field is mandatory.
4. Specify any relevant information about the contract in the Description field.
5. Select the Maintenance Vendor from the drop down. If the maintenance vendor is unavailable in the list, click Add New Vendor button. Specify the Vendor Details such as Name, Description and Contact Person. Save the changes.
6. Specify the support details of the contract in the Support field. Say, support for maintenance, replacement and so on.
7. You can attach relevant documents to the contract.
   1. Click Attach file button.
   2. Click Browse button to choose a file.
3. Select the file and click **Attach file** button. You can see the file attached with the file size.
   Note: Files up to the file size of 10 MB can be attached

8. You can add any number of assets to this contract. To add the assets,
   1. Click **Select Resources for this contract** link.
   2. Enter the **Resource Name**, **Product Type** or **Product** in the search field.
   3. Click **Search** button to get the result. Select the required resources by enabling the check box.
   4. Click **Add Items** button to add the selected items.
   5. Click **View Resources >>** button to view the selected resources.
   6. Click **Add Resources to Contract** button to add resources to the Maintained Assets list. Else, clicking on **< Go back and add more items** to add assets from Select Resources for this contract page.

   **Note**
   1. The assets are listed in Maintained Assets block.
   2. To delete an asset, select the asset and click on the delete icon 🗑️.

9. Select the Active Period (From and To date) of the contract using the calender icon. This field is mandatory.

10. Specify the Maintenance Cost ($) for this contract.

11. To notify users before a contract expires, select **Enable Notification** check box. Select the users from the **User list**. Click >> button to move the user to the **Notified User List**. Specify the days before which the information has to be notified in the **Notified before** field.

12. If there are any **Additional Contract details** (configured under Admin -> Contracts -> Contract - Additional Fields) then enter the same in the respective fields.

13. Click **Save**.
Viewing Owner Details

By default, the logged in technician creating the contract is the owner of the contract. You can view the details of the owner such as email id, phone, mobile, employee ID and job title.

To view the owner details,

1. Click the **Contracts** tab in the header pane to open the Contracts List View page.
2. Click the **Contract Name** link to view the owner details. You can also use the **Filter** drop down to sort and select the contracts.
3. From the Contracts details page, click **Actions** tab -> **View Owner Details** option. The Technician Details page pops up with the complete user details.
4. Close the pop up.
To Renew a Contract

1. Open the Contracts view list page. By default, the list of all Active contracts will be displayed.

2. To renew the expired contracts or a contract about to expire, select the corresponding filter option from the Filter Showing combo box. Ex. All Expired Contracts or Contracts Expiring in next 7 days.

3. Click the Contract Name you wish to renew. This opens View Contract page.

4. Click Actions tab and click Renew Contract option. This opens Renew Contract form with the Original contract rules. The contract name is appended with the word renewed. You can edit the name but ensure that the contract name is unique and does not have the old name.

5. Enter the description of the contract in the Description field.

6. Choose the maintenance vendor from the combo box. If the vendor is not listed, then click Add new link beside the combo box. The Vendor Details page pops up. Specify the name of the vendor, description, and the contact person name in the pop-up window. Save the changes.

7. If you have any information on the type of support, enter the same in the Support text area.

8. To attach any document to the contract, click Attach a file link. This opens Add/Remove attachment page. Click Browse button to choose a file. Select the file to be attached and click Attach button. The selected file is added and is displayed with the file size in the same window just below the file selection field. If you wish to add more than one file then repeat step 2 and 3 till you add all the files.

   **Note:** The total size of the attachments should not exceed 3 MB.

9. Select the Assets that are covered under the contracts from the Maintained Assets list. To add more resources to the list,
   1. Click Select Resources link. This opens Select Resources page.
   2. Specify the Resource Name or Product Type or Product in the Search field.
   3. Click Search button to get the result.
   4. Select the required resources by enabling the check box.
   5. Click Add Items button to add the selected items.
   6. Click View Resources>> button to view the selected resources.
   7. Click Add Resources to Contract button to add resources to the Maintained Assets list.

10. Specify the Active Period of the contract. Specify the From & To date of the contract from the calendar button. This is a mandatory field.

11. Specify the Maintenance Cost in $.

12. Select Enable Notification option by enabling the check box. On enabling you get the User list & Notified User list. To notify users regarding contract expiry select the user from the User list and click forward >> button to move the user to the Notified User List. Specify the days before which the information has to be notified in the Notify before field. And save the details.

13. To notify others about the renewal, select the check box, Notify others about this contract renewal.

14. Select the check box, to disable notifications of the old contract.

15. Click Save.
Printing Contracts

You can print and preview the entire contract content using Print Preview option.

To print a contract,

1. Click **Contracts** tab in the header pane to open the contracts list view page.
2. Click the **Contract Name** link of the contract you wish to print.
3. From the Contract details page, click Actions tab -> **Print Preview** option. The contract details is displayed in a printable format.
4. Click **Ctrl + p** keys to print the contract details.
5. Set the required options and click **Ok**.
E-mailing the owner

By default, the logged in technician creating the contract is the owner of the contract. To email the owner from the application,

1. Click the Contracts tab in the header pane to open the Contracts List View page.
2. Click the Contract Name link to view the owner details. You can also use the Filter drop down to sort and select the contracts.
3. From the Contracts details page, click Actions tab -> Email the Owner option. A Send Notification window opens with the owner's e-mail ID in the To field. The subject reads as "Notification for Contract ID" and the notification number. Say, Notification for Contract ID 1.
4. To notify the contents of the e-mail to any another person then enter their e-mail ID in the CC field.
5. To attach any file to the mail, select Attach file link.
   1. Click Browse button to choose a file.
   2. Select the file and click Attach file button to attach the files. You can see the file attached with the file size. Note: Files up to the file size of 10 MB can be attached.
6. Enter the email content in the Description area.
7. Click Send button to send the mail. This displays a message showing that the Notification has been sent successfully.
8. Close the window.
Notifying the Vendor

To Email the vendor,

1. Click the **Contracts** tab in the header pane to open the Contacts list view page.
2. Click the **Contract Name** link. You can use the **Filter** drop down to sort and select the PO.
3. From the Contacts order details page, click the **Actions** tab -> select **Email the Vendor** option. The **Send E-mail** notification window opens.
4. Enter the vendor address in the **To** field. You can also notify the contents of the email to more than one person by entering their email address in the **CC** field.
5. By default, the **Subject** reads as “Notification for Contacts” with the notification number. Say, Notification for Contacts # 1.
6. Enter the email content in the **Description** area.
7. To attach any attachment to the mail select **Attach file** link.
   1. Click **Browse** button to choose a file.
   2. Select the file and click **Attach file** button. You can see the file attached with the file size. **Note:** Files up to the file size of 10 MB can be attached.
6. Click **Send** button to send the mail. This displays a message showing that the Notification has been sent successfully.
7. Close the window.
Reports

About AssetExplorer Reports

Reports in AssetExplorer can be classified as All Reports, Schedule Reports and Query Reports.

Under All Reports you have All Computers, Servers, Software, Workstation Summary Reports, Audit Reports, Resources, Contracts and Purchase reports.

All Computers (Workstations and Servers)

Under All Computers you have the following reports. On scanning for workstations data for these report types gets populated automatically. Once the data is populated you can have a graphical view of the following reports.

- Computers by Domain
- Computers by Manufacturer
- Computers by OS
- Computers by Processor Manufacturer
- Computers by Processor Type
- Computers by Vendor
- Computers with less or more than 256 MB RAM
- Operating Systems by Region
- Unassigned Workstations by Domain.

Servers

Under Servers you get the following reports in graphical format.

- Servers with less than 10% Free Disk space
- Servers with less than 512 MB RAM.

Software

Under Software you have,

- Software Reports - Purchased Vs Installed software,
- Software by Category and
- Software by Manufacturer.

Workstation Summary Reports

Under Workstation Summary reports you have the following reports in tabular format.

- Software Summary Report
- Hardware Summary Report

Audit Reports

Under Audit reports you have,

- Audit history by Workstation
- Audit history by Time line
- Audit history by Changes
Resources

Under Resources you have the following reports in graphical format,
- Resources By Product Type
- Resources by Vendor

Contracts

Under Contracts you have the following reports in graphical and tabular format.
- Active Contracts
- Contracts by Max Value
- Contracts by Status
- Contracts by Vendor
- Expired Contracts

Purchase

Under Purchase you have the following reports in graphical and tabular format.
- Purchase Orders by Vendors
- Purchase Orders by Ordered Date
- Purchase Orders by Required Date
- Purchase Orders by Status

Under Schedule Reports you have all the scheduled reports.
Under Query Reports you have all reports generated using queries.
New Custom Reports

AssetExplorer enables you to create reports that meet your organization needs.

To create your own custom reports,

1. Login to AssetExplorer application using your user name and password.
2. Click Reports tab in the header pane. This opens the All Reports page.
3. Click New Custom Report button. This opens the Custom Reports page.
4. Specify the relevant Report Title in the given text field. This is a mandatory field.
5. Choose the Report Type by selecting the radio buttons. You can create Tabular Reports, Matrix Reports, Summary Reports and Audit Reports.
6. Choose the module ( and so on) for which you would like to create custom reports. On selecting the Tabular & Matrix Reports, Audit History option will be disabled. On selecting the Summary Reports, only the All Computers, Workstation Alone and Server Alone modules will be enabled. On selecting Audit Reports, only the Audit History module will be enabled.
7. Click Proceed to Report Wizard button. This opens the Display Columns page. This page differs for each report type. Each report type has to go through various steps before generating it as a customized report.

Generating Tabular Reports

Tabular reports are simple reports that allow you to list your data based on certain criteria. You can select the columns to view and group the output data. If you had selected the Tabular Reports option in step 5 above, then follow the steps below to create a tabular report.

**Step 1. Select Columns to Display**

1. Click Select columns to display title.
2. Select the columns to be displayed in the report by selecting it from the Available Columns list and move it to Display Columns list using >> button. You can also order the column list using upward and backward button.

**Step 2. Filter Options**

1. On selecting the columns to be displayed in the reports, you need to specify the Filter Options for the columns. Click the Filter Options title.
2. Specify the Date Filter by selecting the Column, Day and Date.
3. If you wish to add Advanced Filtering select the Column Name, Criteria from the drop down list. And specify the value by clicking the Choose button. You can add 'n' number of Name and Criteria and match with AND or OR condition.

**Step 3. Select Column to Group**

1. Click Column to Group title to open the link.
2. Select the column data to be grouped from the Group by and Order by combo box. You also have an model column on the right hand side of the page.
Step 4. Select Summary Type

1. If you have selected any numeric field in the columns to display option then, this option will be available. Select the column summary options available for each column. Column summary options are count, sum, average, maximum value and minimum value.

2. Select the column summary options by enabling the check box. These selected column summary will be displayed in the reports.

Step 5. Charts

Choose the chart type to show the result in graphical format.

1. Clicking the Charts title opens the choose a chart type page.

2. Select the Chart Type from the combo box. Say Pie chart or Bar chart and so on. On selecting the chart type a model chart type will be displayed on the right hand side of the page.

3. Select Run Report >> button. On running the report you get a tabular report as well as the graphical view of the selected column data.

If you would like to save the report, click Save Report button. Specify the report name, folder name, declare it as public or private and save the report. Enter the Report Name and Save the Report.

If you wish to edit the report click the Edit button, which will take through the Report Wizard again. Modify the details and Save the report.

If you would like to view the SQL Query used in the database to run the report then click Show Query button.

If you would like to mail the report then click Mail this Report button. This opens the mail this report page, select the Format from the combo box. Specify the To address in the given text field. Specify the Subject and Description of the mail and send the mail.

You have an option to export this report to HTML file, PDF file, XLS file and CSV file.

Generating Matrix Reports

Matrix reports provides the data in a grid manner (m x n format). It allows you to study different scenarios based on the chosen criteria. To create a matrix report, you must choose the corresponding radio button in the create report form. In the Filter setting stage of the Report wizard, follow the steps below:

Step 1. Select Column to Group

You have simple grouping and advanced grouping option for matrix reports

Simple Grouping

1. Click the Simple grouping tab. You have two options Top column information and left column information.

2. Select the top column information to be displayed in the report from the combo box. This is a mandatory field.

3. Select the left column information to be displayed in the report from the combo box. This is a mandatory field.

4. Select the summarize column count from the combo box to get the column summary. You can see the model matrix report in between the top and left column information.
Advanced Grouping

1. Click the Advanced grouping tab. You have two options Column grouping and Group by.
2. Select the Columns and Date format from the combo box in the Column Grouping option. Select the Group by from the combo box. You have three options for group by to be displayed in the report. This is a mandatory field.
3. Select the Summarize column from the combo box. You have sum, average, max & min value for numeric columns.

Step 2. Filter Options

1. Click Filter Options title. You have Date Filter and Advanced Filtering for grouping.
2. Select the column name, time and date for the Date filter. For Advanced Filtering, select the Column Name, Criteria from the combo box. Select the Value from the choose button. You can add 'n' number of column Name and Criteria and match with AND or OR condition
3. Click Run Report>>. On running the report you get a Matrix report for the selected column data.

Request Summary Reports

Summary reports are detailed reports that allow you to list your data based on certain criteria. To create a request summary report,

Select the corresponding radio button from the custom reports page and click the Proceed to Report Wizard button to go to next page. You have two steps to generate a complete request summary reports.

Display Columns

The first step to create request summary reports is to select the display columns which needs to be displayed in the request summary report. Select the columns from the Available Columns list box and click >> button to move them to Display Columns list box. Click the << button if you want to remove any column from the Display Columns list box.

Click Next button. This leads you to the grouping of columns, where you can choose two levels of grouping.

Filter Options

1. If you are using the date/time filter criteria, select the date column name from the Select Column combo box.
2. Select the period for which you want to generate the report. If you would like to generate report during this week, last week, this month, last month, this quarter, last quarter or today, yesterday then select the During radio button and select the time period from the combo box. (OR) If you wish to provide a custom period, then select the From and To date using the calendar button.
3. To use Advanced Filtering, you first need to select the radio button for matching all the selected criteria or any one of them. Then from the column listing, select the various columns from the list and set the match operator and mention the values for matching the column as (is, is not, contains and so on) from the combo box.
4. Click the Choose button and select the value for the column to add as a filter condition.
5. Click as Add to Filter button to add the filter condition to the filter set which gets listed under the Filter Set title.
6. Click Next button to go to the grouping of data.
Audit Reports

Audit reports are detailed history report that allow you to list your inventory history data based on scan time criteria. Click Proceed to Report Wizard button to go to the next page. This opens the Audit History Report page.

You have three audit history reports options, on scanning the workstation you get the updated version of all the audit reports.

- **Audit history by Workstation**: Audit history by workstation gives a complete audit reports of the hardware and software details of the workstation.
- **Audit history by Time line**: Audit history by time line gives a detail overview of all the actions taken place in workstation for a specific time period.
- **Audit history by Changes**: Audit history gives a complete report on all changes taken place in workstation.

Select any of the three audit history report options. Specify the scan date from the combo box. Click Run Report button. You get the audit history report.

If you would like to save the report, click Save Report button. Specify the report name, folder name, declare it as public or private and save the report.

If you wish to edit the report click the Edit button, which will take through the Report Wizard again. Modify the details and Save the report.

If you would like to view the SQL Query used in the database to run the report then click Show Query button.

If you would like to mail the report then click Mail this Report button. This opens the mail this report page, select the Format from the combo box. Specify the To address in the given text field. Specify the Subject and Description of the mail and send the mail.

You have an option to export this report to HTML file, PDF file, XLS file and CSV file.

Delete Custom Reports

You can delete the custom reports that you have created and saved. Just click Delete link available against the custom report that you wish to delete. This will delete the report.
New Query Reports

If you could not generate any specific report using **New Custom Report** then you can generate those reports using **New Query Reports**. Using query editor you can join different tables from different modules and generate any type of report.

**To generate query reports,**

1. Log into AssetExplorer application using your user name and password. This opens the Configuration Wizard page.
2. Click on **Reports** tab in the header pane. This opens the All Reports page.
3. Click **New Query Report** button. This opens the Query Editor page.
4. Select the **Table Schema** from the combo box. Click **Get** button to get the **Table Schema** of the selected table.
5. Specify the **Report Title** in the in the given text field.
6. Specify the query to be executed for getting the reports in the **Query** field.
7. Select the column to be grouped from the **Group by** combo box.
8. The logs will display all error messages on providing any wrong query.
9. Click **Run Report** to run query report.

**Tips**

1. Date Formulae: `DATE_FORMAT (FROM_UNIXTIME (COLUMN_NAME/1000), '%d-%m-%Y %k: %i') 'Column Alias'`.
2. Minutes Formulae: `ROUND (((COLUMN_NAME/1000)/60)) % 60) 'Minutes'`.
3. Hours Formulae: `ROUND (((COLUMN_NAME/1000)/3600)) 'Hours'`.
4. Compare Date: `COLUMN_NAME >= (UNIX_TIMESTAMP (DATE ('2006-07-24 00:00:00')) * 1000)`.
5. Convert Memory in GB: `(((MEMORY_COLUMN)/1024)/1024)) 'Column Alias'`.
6. Default Value For Null Data: `COALESCE (COLUMN_NAME, 'Unassigned')`.
7. Group by: Query statement will be ends with order by `<column_index>`.

**Additional Field tables**

1. Technician Additional Fields - Technician_Fields
2. Asset Additional Fields - Asset_Fields
3. Workstation Additional Fields - Workstation_Fi
Schedule Reports

You can schedule reports in AssetExplorer. On scheduling the reports, the selected reports gets generated automatically on the specified date and time. The generated report will be sent to the respective person through e-mail. Thus by scheduling the reports you get the data in regular intervals without manually generating it.

To Schedule Reports,

1. Log in to AssetExplorer application using your user name and password.
2. Click the Reports tab in the header pane. This opens the All Reports page.
3. Click New Scheduled Report button. This opens the Schedule Report Settings page. You have four option to schedule reports,

   **Generate Once:** To generate report once click Generate Once radio button. Specify the date using the calendar button and Time from the combo box on which the report has to be generated.

   **Daily Report:** To generate reports on a daily basis click Daily Report radio button and specify the From Date, Time, report to be scheduled and the E-mail address of the person to whom the report has to be sent. Save the details.

   **Weekly Report:** To generate weekly report click Weekly Report radio button. Specify the days of the week on which you want to generate reports by selecting the check box. Or select Everyday check box to generate reports on daily basis. And specify the time.

   **Monthly Report:** To generate reports on a monthly basis click Monthly Report radio button. Specify the month on which the report has to be generated by enabling the check box. Or select Every Month check box to generate reports on monthly basis.

4. Once you select the Schedule Type, select the Report to schedule by selecting the Report Name from the combo box. The list will display all the available reports such as, All Computers, Servers, Software, Workstation Summary Reports, Audit Reports, Resources, Contracts, Purchase and so on. This is a mandatory field.
5. Select the report Format type from the combo box. This is a mandatory field. Ex: PDF, XLS, HTML, CSV.
6. Specify the E-mail ID of the person to whom the generated report has to be sent. Specify the Subject and Message in the given text fields.
7. Save the details.
**Custom Settings**

The custom settings wizard helps you to customize the report column size. This helps to increase or decrease the tabular column size, matrix column size and modify the date and time format of your custom reports.

1. Log in to AssetExplorer application using your user name and password.
2. Click the **Reports** tab in the header pane. This opens the **All Reports** page.
3. Click the **Custom Settings** button. This opens the **Report Settings** page.
4. If you wish to customize the **Tabular column size**, specify the size of the small text, large text, number size and date and time text. And update the changes.
5. If you wish to customize the **Matrix column size**, specify the size of the cell width and cell height and update the changes.
6. You can also change the **Date and Time format** to be displayed in the report. If you specify the format in the given text field as MM-dd-yyyy HH:mm then the result would be Date: 09-20-2007 Time:03:20.
7. You can also change the General Settings say, Disable links in report, Remove the title header while exporting report, one group per page and specify the text or value for the empty field.
8. Click the **Update** button to update the changes. While generating reports the customized report format will be displayed.
Exporting Report as PDF

You can export the report as PDF and save the PDF version of the report for future reference.

To export a report as PDF,

1. Click any of the available reports in the report list view page. Click the Export as PDF link available at the top right corner of the report block.
2. If you have a PDF reader (Acrobat Reader), you will be asked if you want to open the document in your default PDF reader. Or else, you can choose to save the PDF document to your disk by selecting the Save to Disk radio button. If you want to open the PDF in a PDF reader, then leave the default selected option as is.
3. Click OK. The PDF document is opened in your default PDF reader.
4. Save the PDF document for future reference.

To export as XLS file,

In the report view, click the Export as XLS file link available at the top right corner of the page to export the file in excel format.

To export as CSV file,

In the report view, click the Export as CSV file link available at the top right corner of the page to export the file in CSV format.
Appendix

This section explains features that are not grouped under any module. It also includes steps to perform backup of data, change web server port, database configurations and troubleshooting tips.

- System Log Viewer - View the error logs generated by AssetExplorer application.
- Database Configuration - Know how to configure the database.
- Change Web Server Port - Process to change your web server port.
- Backup and Restore - Know how to perform a back up and restore process.
- Moving AssetExplorer to new server - Steps to move AssetExplorer to a new server.
- Troubleshooting - Solutions for problems faced while scanning the workstations.
System Log Viewer

You can view the error logs generated by the AssetExplorer application online.

To access the Error Log page,

1. Login to AssetExplorer application with the username and password of an Admin.
2. Click the Support tab in the header pane.
3. Click the System Log Viewer link. The System Log page opens to view the Log records with the message, module, sub module, action upon which the error occurred, Type and Date of occurrence.

Viewing Individual Error Detail

To view the individual error details,

1. Click the System Log Message link to view the error details. The System Log details page pops up.
2. The System Log Message field contains the complete error message.
3. The Module and Sub Module field indicates the module and the sub module in which the error occurred. Say, Admin is the module, Roles is the sub module.
4. The result of the action upon which the error occurred is indicated in the Action field.
5. The Occurred At field indicates the date and time when the error occurred.
6. If the probable cause of the error is known, then the cause is displayed in the Probable Cause field.
7. The Performed By field indicates the origin of the error. For example, if it is a system-generated error, then the Performed By field contains System as its value.
8. Click Close after viewing the details of the error message. None of these fields are editable.

Searching Error Logs

To search for error logs,

1. If you are in the Error Log list view page, then by default, the System Log option is chosen in the Search in combo box. If not, then choose System Log.
2. Enter the search string in Enter Keyword text field.
3. Click Go. The search results displays all the error logs that match the search string.
4. Click the error log of your choice to view the same.

Delete Error Logs

You can delete individual or all the error logs. To delete individual error logs

1. In the Error Log list view, select check boxes beside the Error Messages that you wish to delete.
2. Click Delete.

If you want to delete all the existing error messages, then click the Delete All button.
Database Configuration

By default AssetExplorer supports **MY SQL database**. To switch over to **SQL database** you need to configure SQL server. To establish connection and start the server.

**Configuring MS SQL Server**

1. Execute the changeDBServer.bat [changeDBServer.sh for Linux] file presented under the ServiceDesk Home. This opens the **Database Setup Wizard** page. Fill in the details of the form to configure sql server.
   - **Server Type**: Select the server type from the combo box. Say MS SQL.
   - **Host Name**: Enter the IP Address/host name in which the database is available. The default host name is 'localhost'.
   - **Port**: Specify the port in the given text field. The default value is 1433.
   - **Database**: By default the database name will be servicedesk in non-editable format.
   - **User Name**: Specify the user name to login to the server in the given text field.
   - **Password**: Specify the password for the username in the given text field.
2. To check the availability of connection press the **Test** button. A pop up window pops up showing 'Connection Established' message.
3. Click **OK** to proceed.
4. Click **Save** button to save the SQL server settings.
Configuring MYSQL Server

1. If you are using a remote MySql server and do not want to use the inbuilt server then,
2. Select Server Type as MySql server. This opens the database wizard page.
3. Specify the Host Name, Port, User Name & Password.
4. Click Test button and check the availability of the connection.
5. Once the Connection is Established, Save the details and start the server.

Non UI users

Run the changeDBServer.bat under command prompt by passing parameter like given below

>changeDBServer.bat --console

It will get the DB Server necessary information from the console.

Troubleshooting Tips

MYSQL Connection Resolution

Verify the following,

- Check if the MY SQL server is running.
- Check if the server name or the port number is misspelled or incorrect.
- If the MY SQL server is running in a remote machine then there may be a firewall blocking the port number you have entered.
- If none of the above mentioned issues matches then contact your system administrator.
MS SQL Connection Resolution

If a connection is refused and an exception is thrown by SQL Server as ‘unable to connect the server’ then there could be following reasons why this could happen such as,

- The server name is misspelled or the port number is incorrect
- The SQL server will not configured to use TCP/IP then in this case enable TCP/IP from SQL servers network utility application.
- If there is a firewall blocking the port 1433 on the server then you will not be able to connect to the server.
- To confirm the firewall block connect to TCP/IP use \"telnet<server_host>1433\" to confirm the block.
- SQL Server Instance is not currently supported by AssetExplorer and will be available in the feature release. You can also connect to SQL Server named instance once if you know the machine name and port of the named instance.
- Create new user with full privileges as shown below,
Changing Web Server Port

- In Windows
- In Linux

**In Windows**

Follow the steps given below to change the web server port where the AssetExplorer server will be running:

1. Go to `<AssetExplorer>`\bin directory.
2. Execute the file `changeWebServerPort.bat` at command prompt as shown below:

   ```
   changeWebServerPort.bat <new port number> <http or https>
   ```

   The web server port is reset to the new port number that you have specified.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>https</td>
<td>To start the AssetExplorer server in https mode.</td>
</tr>
<tr>
<td>http</td>
<td>To start the AssetExplorer server in http mode. By default, executing the file as <code>changeWebServerPort.bat &lt;new port number&gt;</code> will start the server in http mode.</td>
</tr>
</tbody>
</table>

If the port number is occupied, you will be prompted to enter a different port number. If you do not wish to enter a different port number then press `N` on your keyboard to exit the application. Else press `Y` and enter a different port number that is unoccupied.

This change will be effected only when you restart the server. To connect to the AssetExplorer server after restarting, the new port number must be used.

**In Linux**

Follow the steps given below to change the web server port where the AssetExplorer server will be running:

1. Go to `<AssetExplorer>/bin` directory.
2. Execute the file `changeWebServerPort.sh` at command prompt as shown below:

   ```
   $ sh changeWebServerPort.sh <new port number> <http or https>
   ```

   The web server port will be reset to the new port number that you have specified.

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<th>Mode</th>
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<tr>
<td>https</td>
<td>To start the AssetExplorer server in https mode.</td>
</tr>
<tr>
<td>http</td>
<td>To start the AssetExplorer server in http mode. By default, executing the file as <code>changeWebServerPort.bat &lt;new port number&gt;</code> will start the server in http mode.</td>
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If the port number is occupied, you will be prompted to enter a different port number. If you do not wish to enter a different port number then press `N` on your keyboard to exit the application. Else press `Y` and enter a different port number that is unoccupied.

This change will be effected only when you restart the server. To connect to the AssetExplorer server after restarting, the new port number must be used.
Back up and Restore

In Windows

- Backup Process
- Restore Process

In Linux

- Backup Process
- Restore Process

In Windows

Backup Process:

Follow the steps given below to take a back up of the ManageEngine AssetExplorer data:

1. From the command prompt, go to `<AssetExplorer>\backup` directory and execute `backUpData.bat` as shown, `C:\ManageEngine\AssetExplorer\bin\backUpData.bat`.
2. A backup of the data and the file attachments that have been added to the application is created in `<AssetExplorer>\backup` directory.
3. The file name for the back up file is of the pattern BackUp_month_date_year_hr_min.data. An example of the backup file name:
   `backup_assetexplorer_7013_fullbackup_12_18_2008_15_22.data`

Restore Process:

To restore the back up data,

1. Go to `<AssetExplorer>\bin` directory from the command prompt. Execute the file `restoreData.bat` at command prompt as shown below:
   `C:\ManageEngine\AssetExplorer\bin\restoreData.bat`
2. The **Restore Data** pop up window appears. Browse the backed up file and click **OK**.
3. The data begins to restore. While restoring the existing data is rewritten with the backed up file.

**Note:**
1. The AssetExplorer server needs to be shut down before you restore the data.
2. The back up file name has to be the .data file.
3. Click **Alt+Tab** to view the Restoring Data pop up if its not visible.

4. **Close** on successful installation.

**In Linux**

**Backup Process:**

Follow the steps given below to take a back up of the ManageEngine AssetExplorer data:

1. Go to `<AssetExplorer>/bin` directory from the command prompt.
2. Execute the `backUpData.sh` file as given below, `$ sh backUpData.sh` The back up file is created in the `<AssetExplorer>/backup` directory.
3. The file name for the back up file is of the pattern `BackUp_monthdate_year_hr_min.data`. An example of the back up file name: `backup_assetexplorer_7013_fullbackup_12_18_2008_15_22.data`

**Restore Process:**

To restore the back up data

1. Go to `<AssetExplorer>/bin` directory from the command prompt.
2. Execute the file `restoreData.sh` at command prompt as shown below: `$ sh restoreData.sh <backup file name>`
3. The data begins to restore. While restoring the existing data is rewritten with the backed up file.

**Note**
1. The AssetExplorer server needs to be shut down before you restore the data.
2. The back up file name has to be the .data file.
Moving AssetExplorer to a new server

If you are moving the existing AssetExplorer server to a new server, then follow the steps given below,

1. Stop ManageEngine AssetExplorer service.
2. Kindly upgrade AssetExplorer, if required. Refer to the link below to check if you are in the latest version;
3. After the upgrade process, start and stop ManageEngine AssetExplorer service once.
   **Note:** If you are planning on performing multiple upgrades, please make sure to start and stop the application, and perform a backup before each and every upgrade.
4. From command prompt, go to `C:\ManageEngine AssetExplorer\bin` and execute `backUpData.bat` command to start the data backup. For more information on performing a data backup, refer Backup Process.
5. Install AssetExplorer on the new server.
6. Copy the backup folder from the old server to `[AssetExplorer-Home]` of the new server.
7. Restore the backed up data in the new server. For more information on restoring the backed up data, refer Restore Process.
8. Start AssetExplorer Server once after restoring the data in the new server.

**Note**

Data can be restored only across same builds of AssetExplorer version. Check the build version by clicking the About link in the application or execute the file `buildInfo.xml` under `<AssetExplorer Home>/server/default/conf` directory in the command prompt.

You can also download the earlier builds of AssetExplorer from the Archives website: http://archives.manageengine.com/asset-explorer/
## Troubleshooting

This section gives you solutions for the problems faced while scanning for workstations in AssetExplorer Inventory module.

1. Either access denied for the user or the remote DCOM option might be disabled in the workstation.
2. User does not have the access privileges to perform this operation.
3. Remote DCOM option is disabled in the Server machine.
4. Connection to RPC server in the workstation failed.
5. One of the WMI components is not registered properly.
6. Execution failure in the WMI Service of workstation.
7. WMI Service is disabled in the workstation.
8. Request for scan operation rejected by the workstation.
9. Connection to Telnet Service in the workstation failed.
10. Either Username or Password is incorrect in the workstation.
11. Scan operation Timed out.
12. The operation invoked is not supported in the current platform.
13. General failure while performing the operation.

<table>
<thead>
<tr>
<th>Error Message</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Either access denied for the user or the remote DCOM option might be disabled in the workstation</td>
<td>This error message is shown when scanning of a Windows workstation fails due to any of the following reasons:</td>
</tr>
<tr>
<td></td>
<td>1. The login name and password provided for scanning might be invalid in the workstation.</td>
</tr>
<tr>
<td></td>
<td>2. Remote DCOM option might be disabled in the remote workstation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resolution</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Check if the login name and password are entered correctly.</td>
<td></td>
</tr>
<tr>
<td>2. Check if Remote DCOM is enabled in the remote workstation. If not enabled, then enable the same. To enable DCOM in Windows 2000 Computers:</td>
<td></td>
</tr>
<tr>
<td>1. Select Start &gt; Run</td>
<td></td>
</tr>
<tr>
<td>2. Type DCOMCNFG in the text field</td>
<td></td>
</tr>
<tr>
<td>3. Click OK.</td>
<td></td>
</tr>
<tr>
<td>4. Select Default Properties tab</td>
<td></td>
</tr>
<tr>
<td>5. Check the box &quot;Enable Distributed COM in this machine&quot;</td>
<td></td>
</tr>
<tr>
<td>6. Press OK.</td>
<td></td>
</tr>
<tr>
<td>To enable DCOM in Windows XP Computers:</td>
<td></td>
</tr>
<tr>
<td>7. Select Start &gt; Run</td>
<td></td>
</tr>
<tr>
<td>8. Type DCOMCNFG in the text field</td>
<td></td>
</tr>
<tr>
<td>9. Click OK</td>
<td></td>
</tr>
<tr>
<td>10. Right Click on Component Services &gt; Computers &gt; My Computer</td>
<td></td>
</tr>
<tr>
<td>11. Click Properties</td>
<td></td>
</tr>
<tr>
<td>12. Select Default Properties tab in the frame that pops</td>
<td></td>
</tr>
<tr>
<td>13. Check the box &quot;Enable Distributed COM in this machine&quot;</td>
<td></td>
</tr>
<tr>
<td>14. Press OK</td>
<td></td>
</tr>
</tbody>
</table>
3. Check if the user account is valid in the target workstation. For this execute the following commands in the command prompt (of the server machine). net use \<RemoteComputerName>\C$ /u:<DomainName\UserName> "<password>" net use \<RemoteComputerName>\ADMIN$ /u:<DomainName\UserName> "<password>" Replace the relevant value within <>. Supply password within the quotes. If these commands show any error message, then the provided user account is not valid in that remote computer.

<table>
<thead>
<tr>
<th>Error Message</th>
<th>User does not have the access privileges to perform this operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cause</td>
<td>Such error messages are shown, if the User ID provided for scanning does not have sufficient access privileges to perform the scanning operation. Probably, this user does not belong to the Administrator group of the workstation.</td>
</tr>
<tr>
<td>Resolution</td>
<td>Move the user to the Administrator Group of the workstation (or) Scan with an administrator (preferably a Domain Administrator) account.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Error Message</th>
<th>Remote DCOM option is disabled in the Server machine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cause</td>
<td>Remote DCOM option might be disabled in the machine running AssetExplorer Server.</td>
</tr>
<tr>
<td>Resolution</td>
<td>AssetExplorer uses Windows Management Instrumentation (WMI) to scan the remote workstations. WMI works over Remote DCOM and hence this option must be enabled for scanning the remote machines. To know how to enable DCOM in Windows system refer to resolution of the error message Either access denied for the user or the remote DCOM option might be disabled in the workstation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Error Message</th>
<th>Connection to RPC server in the workstation failed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cause</td>
<td>This message is shown when a firewall is configured on the remote computer. Such exceptions mostly occur in Windows XP (SP-2), when the default Windows Firewall is enabled.</td>
</tr>
<tr>
<td>Resolution</td>
<td>Disable the default Firewall in the workstation. To disable the Firewall in Windows XP (SP2) 1. Select Start-&gt;Run 2. Type Firewall.cpl 3. Click OK. 4. In the General tab, click Off. 5. Click OK. If Firewall cannot be disabled then, we can launch Remote Administration feature for administrators in the remote computer. The following command when executed in the target computer, can enable the feature: netsh firewalel set service RemoteAdmin After scanning the computer, if required, the Remote Administration feature can also be disabled. The following command disables the feature: netsh firewalel set service RemoteAdmin disable</td>
</tr>
<tr>
<td>Error Message</td>
<td>Cause</td>
</tr>
<tr>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>One of the WMI components is not registered properly</td>
<td>This message is shown if WMI is not available in the remote windows workstation. This happens in the Windows 9x, Windows NT and Windows ME. Such error codes might also occur in higher versions of Windows if the WMI Components are not registered properly.</td>
</tr>
<tr>
<td>Execution failure in the WMI Service of workstation</td>
<td>Such error messages are shown, when there are some internal execution failures in the WMI Service (winmgmt.exe) running in the remote workstation. Probably the last update of the WMI Repository in that workstation could have failed.</td>
</tr>
<tr>
<td>WMI Service is disabled in the workstation</td>
<td>This error message is shown when the WMI Service (winmgmt.exe) is not enabled in the remote workstation.</td>
</tr>
<tr>
<td>Request for scan operation rejected by the workstation</td>
<td>DCOM settings in Registry of the target workstation reject the scan request.</td>
</tr>
<tr>
<td>Error Message</td>
<td>Connection to Telnet Service in the workstation failed</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>Cause</td>
<td>Telnet Service might not be running in the target computer (or) Telnet Service is not running in default port 23.</td>
</tr>
<tr>
<td>Resolution</td>
<td>Discovering remote Linux Machines by AssetExplorer is done using Telnet. Ensure that Telnet is running in the remote workstations in the default port 23.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Error Message</th>
<th>Either Username or Password is incorrect in the workstation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cause</td>
<td>The username and password provided to scan the remote workstation is incorrect.</td>
</tr>
<tr>
<td>Resolution</td>
<td>Discovering Linux Workstations, in AssetExplorer is done using the Telnet. Provide a valid username and password that can successfully establish a telnet session with the target workstation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Error Message</th>
<th>Scan operation Timed out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cause</td>
<td>Target workstation did not respond within the default time limit. This might be due to some delay in the network.</td>
</tr>
<tr>
<td>Resolution</td>
<td>Try scanning the workstation, sometime later. If the same error message repeats, contact AssetExplorer Support Team at <a href="mailto:assetexplorer-support@manageengine.com">assetexplorer-support@manageengine.com</a>.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Error Message</th>
<th>The operation invoked is not supported in the current platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cause</td>
<td>Such error codes are shown if the workstation has an Operating System other than Windows or Linux.</td>
</tr>
<tr>
<td>Resolution</td>
<td>Currently, Network Discovery in AssetExplorer supports Windows or Linux machines, only.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Error Message</th>
<th>General failure while performing the operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cause</td>
<td>Some unexpected exception occurred while, scanning the workstation.</td>
</tr>
<tr>
<td>Resolution</td>
<td>Contact the AssetExplorer support team at <a href="mailto:assetexplorer-support@manageengine.com">assetexplorer-support@manageengine.com</a> with the Error log files. You can obtain the error log files from Support tab by clicking on the Support File link in the AssetExplorer application.</td>
</tr>
</tbody>
</table>